Modal existential wh-constructions

Šimík, Radek

CHAPTER 5

The internal syntax of MECs

In the previous chapter I put forth a proposal concerning the external syntax of MECs, i.e. their base-generation position within the argument structure of the matrix predicate. As opposed to all previous approaches, I argued that MECs do not correspond to direct objects of the matrix predicate (or what I called the participant arguments), but rather to their event extensions. In this chapter, I explore the consequences of this proposal for the internal syntax of MECs.

One of the most striking accomplishments of the event-extension analysis is that it provides a principled explanation of the apparently ambivalent nature of MECs—they behave as clauses (or more generally extended projections of the verb) syntactically but as nominals semantically. While this somewhat paradoxical generalization has been well-established and not seriously challenged for about twenty years now (roughly since Grosu 1987), nobody has ever provided an insightful explanation of this generalization (and few have actually tried). Under the event-extension account, the MEC must be verbal in nature, since it is integrated as an event extension within the spine of verbal projections. The source of their apparently nominal interpretation is the wh-operator in their left periphery, which binds a variable whose reference is identified with the reference of the participant argument. In effect, the verb-noun ambivalence is quite explicitly reflected in the semantic representation, since MECs characterize relations between events and individuals.

The investigation of MECs' internal syntax does not finish with stating that MECs are verbal rather than nominal projections. It remains to be determined what level of projection they correspond to. In the mainstream literature, this problem has been largely ignored and scholars have assumed that MECs are CPs. After all, they exhibit wh-movement and wh-movement always targets

the CP. However, there have been episodic observations which strongly suggest that MECs in some languages cannot be as big as CPs (this argument was most clearly formulated in Ceplová 2007 for Czech). So, what is the prediction of the event-extension analysis?

There is one important respect in which the MECs (under the present analysis) differ from their related constructions, in particular wh-questions and free relative clauses, and that is the embedding context. Both wh-questions and free relatives are types of A-bar constructions which crucially rely on being selected by a functional head (Qu and D, respectively; see §3.2), i.e. a head that maps to an expression with a purely logical meaning. MECs, on the other hand, represent a type of A-bar construction which is selected by a lexical head. As the generally accepted working hypothesis about functional and lexical categories has it, only the former kind of categories are strictly and universally constrained in the position where they are generated and in the kind of category they select for. It follows from this hypothesis that questions and free relatives—constructions headed by functional categories—are predetermined to be of a certain syntactic size, namely precisely that size that the corresponding functional category requires. Consequently, wh-questions and free relatives are always CP-based.

The prediction for MECs is precisely the opposite because they are selected by a lexical head. What syntactic material lexical heads select is subject to cross-linguistic (and intra-linguistic) variation. This is especially apparent from the phenomenon of serial verb constructions. In these constructions, lexical verbs select projections of other verbs, such as in *begin to work* or *try to go*. The level of predictability with respect to what syntactic size a particular lexical verb in a particular language calls for is remarkably low. In some languages the verb *try* selects for a CP, in others for a TP, and yet in others perhaps for a VP (see e.g. Wurmbrand 2001; Dotlačil 2004; Ter Beek 2008). Moreover, in many languages, one particular verb can be compatible with more selectional patterns. Therefore, if MECs are selected by a lexical predicate, as argued in the preceding chapter, then we predict there to be no *a priori* constraint on their syntactic size. In this chapter, I will argue that this prediction is borne out. I will show that there are MECs of various syntactic sizes—from VPs (or vPs) to CPs. The only effective constraint that can (partly) predict the size of the MEC in a particular language, is wh-movement, on which the MEC heavily relies. If wh-movement in a language is constrained to target the CP domain (which is the case in most languages), then MECs in that language must be CPs. If, on the other hand, wh-movement is not constrained in that way (as in West Slavic languages), then MECs are allowed to be smaller, in particular vPs.

The finding that wh-fronting constructions need not be CPs has interesting implications for the theory of wh-movement. It seems to suggest that wh-movement is not feature-driven, at least to the extent that there is no particular functional head that has a "wh-feature" (such as C[+wh]). What forces wh-

constructions to be of some particular size, e.g. a CP, are factors *external* to wh-movement, mainly general constraints on movement in that language and also functional heads that operate on the operator-variable dependencies that the wh-movement creates. Wh-movement itself applies freely, targets any projection, and therefore reduces to syntactic adjunction. This conclusion matches the assumption about fronted wh-word semantics introduced in §4.4.2, where I argued that fronted wh-words have no type, simply correspond to logical lambda-operators (Heim and Kratzer 1998), and therefore impose no restrictions whatsoever on the semantic type of their sister (contra Caponigro 2003). This in turn points to the tentative conclusion that the unconstrained nature of wh-movement has its source in semantics.

This chapter is built up as a careful exposition of arguments supporting the predictions and hypotheses stated above. It is organized as follows. In §5.1 I briefly discuss the development of analyses of MECs' internal syntax. The currently held position that MECs are CPs (i.e. like embedded questions) will be shown to be superior to the (free) relative clause DP/NP analysis, pursued mainly in the 1980s. This supports the event-extension analysis, which predicts MECs to be verbal. In the rest of the chapter, I will provide support for the more specific aspect of the event-extension analysis, namely that MECs are selected by a lexical (rather than functional) head and are therefore predicted to be flexible in terms of their syntactic size. In §5.2 I show that the CP analysis, despite its great potential, cannot possibly be the only one. There are languages with MECs that are not CPs. The verbs that select them behave as restructuring verbs, either of the control or even of the raising type. The issue of control and raising is discussed in §5.4. It will be shown that even for languages with sub-CP strategies, the CP strategy is generally available, pointing to the flexibility of the MEC syntactic size. In §5.3 I turn to the problem of wh-movement and related issues (such as sluicing). The question of interest is: what kind of wh-movement are we witnessing in cases of MECs that are not CPs? Again, we will see that different languages use different strategies, and some can use more. In §5.6 I conclude the chapter.

5.1 Internal syntax: state of the art

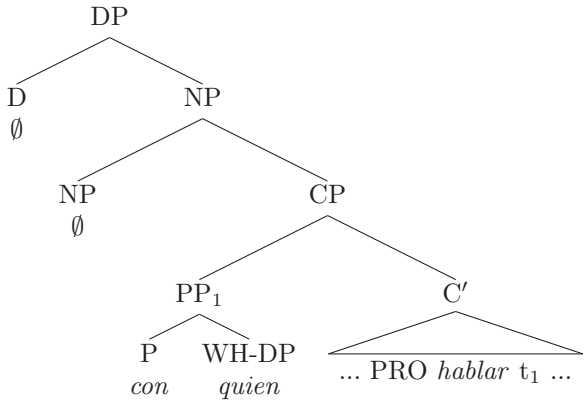
There are two main types of syntactic analyses of MECs: (i) analyses based on the idea that MECs are (free) relative clauses, adjoined to phonologically empty nominal material (NP/*pro*); (ii) analyses arguing that there is no nominal material present in the syntax and MECs are simply wh-clauses (CP). Below, I pay some attention to these analyses and the arguments that led scholars to adopt them.

5.1.1 The nominal analysis

In the context of Romance linguistics, the formal study of MECs branched off from the study of relative clauses. This is reflected in the early analyses. For instance Plann (1975, 1980) argues that MECs are essentially relative clauses adjoined to an empty nominal head and an empty determiner. The diagram in (2) illustrates her analysis of (1), modified according to current labeling and analytical standards.[1]

(1) *Spanish* (Plann 1980:134/135)
No tiene con quien hablar.
NEG have:3SG with who speak:INF
'She doesn't have anybody to speak with.'

(2) *No tiene*



Adopting (2), Plann also explicitly rejects the clausal analysis, under which the NP and DP layers are absent. Her argument has to do with selection: she correctly notices that MECs are selected by predicates that normally select for nominal phrases rather than clauses. She further supports her analysis by putting forth a number of correlations between MECs and overtly headed infinitival relatives: (i) heads of infinitival relatives must be indefinite (3a), (ii) headed infinitival relatives cannot occupy the subject position (3b), and (iii) they can only be selected by a limited set of predicates (not illustrated by Plann).

(3) *Spanish* (Plann 1980:128)
a. Ana no pudo encontrar { ningún /* el} libro que leer.
Ana NEG could find:INF any / the book COMP read
'Ana couldn't find {any / the} book to read.'

[1] I am using the following correspondences: C′ ≈ S; CP ≈ S′; NP ≈ N″; D ≈ DET; DP ≈ N‴; WH-DP ≈ N‴[+WH]. Notice that Plann treated nominal phrases as projections of N heads, a standard assumption before Abney (1987).

b. Un abrigo (* que ponerse) ha llegado por correo.
a coat COMP put.on:REFL has arrived by mail
'A coat (to put on) has arrived by mail.'

Notice that these three properties also characterize MECs. On Plann's analysis, they are derived automatically—simply by virtue of MECs belonging to the of class infinitival headed relatives. Unfortunately, Plann gives no explanation of why these properties hold of overtly headed infinitival relatives in the first place. We are thus left with a mere correlation. Another problem is that the correlation only holds of a subset of headed infinitival relatives, namely those relativizing the relative clause-internal direct object.[2] If they are introduced by a relative pronoun embedded in a PP these restrictions vanish. This is illustrated by (4a), which shows that such infinitival relatives can be headed by a definite DP, and by (4b), which shows a DP with an infinitival relative in the subject position.

(4) *Spanish* (Plann 1980:128/129)

a. Ana no pudo encontrar el lápiz con el que firmar el
Ana NEG could find the pencil with the which sign:INF the
contrato.
contract
'Ana couldn't find the pencil with which to sign the contract.'

b. Una maleta en la que meter los libros ha llegado por
a suitcase in the which put the books has arrived by
correo.
mail
'A suitcase in which to put the books has arrived by mail.'

In MECs, on the other hand, these restrictions apply across the board, i.e. irrespective of the underlying syntactic position of the wh-element. It should be emphasized, however, that this fact does not prove Plann's analysis wrong. The restrictions can well have a common source in both object-infinitival relatives and MECs, while some specific factor causes them to apply more generally in MECs (or less generally in infinitival relatives). Unfortunately, Plann does not suggest what this factor might be.

Some version of Plann's analysis was adopted by a number of scholars. Mostly, they provide no further supporting arguments in favor of the nominal nature of MECs and deal with issues orthogonal to their categorial status. Virtually the same analysis as Plann's is assumed in Růžička (1994), who concentrates on issues specific to Russian negative MECs. Rappaport's (1986) analysis of Russian MECs is similar in spirit. The matrix verb is considered a two-place predicate, whose internal argument is the wh-word, which is in turn obligatorily modified by an infinitival relative. Suñer's (1983) agenda is to pro-

[2]The data also appear to be compatible with a different characterization, namely that the restrictions only hold of infinitival relatives introduced by the complementizer *que*.

vide a more or less unified account of MECs and free relatives, while capturing the fact that matching effects are observed in the latter but not in the former. The structure that Suñer uses is minimally different from that of Plann's: she assumes that MECs are headed by a phonologically empty *pro*, which is dominated by an NP; no determiner layer is postulated. See below for Grosu's (1987) criticism of this account. The most recent nominal analysis is provided by Agouraki (2005) for Greek, who also proposes to treat MECs roughly on a par with free relatives, i.e. as D-headed CPs. Agouraki assumes that the D head is the locus of intensional and polarity properties, causing MECs' limited distribution.

Summing up, the most convincing evidence supporting the view that MECs are syntactically nominal comes from three facts: (i) they are selected by verbs that normally subcategorize for NPs, rather than CPs, (ii) they are interpreted as (existential) indefinites, and (iii) they can typically be paraphrased by NPs modified by a relative clause. As we saw, Plann (1980) constructs one more argument, which is based on partial analogy between MECs and infinitival headed relatives.

Problems of the nominal analysis

Despite the overall plausibility of the nominal analyses, they fall short of accounting for a whole range of facts. Let us first evaluate them with respect to Spanish and Russian, which are among the (few) languages that this type of analysis was devised or at least intended for.

First of all, the MEC can hardly be seen as a subtype of the infinitival headed relative in a language where the latter does not exist. This is the case of Russian, for which the relevant contrast is illustrated below: (5a) is an MEC, (5b) is an ungrammatical infinitival relative. The analysis of Růžička (1994) is therefore dubious from the very start.[3]

(5) *Russian* (Zhenya Markovskaya, p.c.)
   a. Ja našel čto počitat'.
      I found what:ACC read:INF
      'I found something to read.'

[3]Rappaport (1986) gives three examples of infinitival relatives in Russian, two of which are illustrated below:

(i) *Russian* (Rappaport 1986:17)
   a. U menja net stola, za kotorym rabotat'.
      at me:GEN NEG:be:IMPRS table at which work:INF
      'I do not have a table to work at.'
   b. Ja tak i ne našel čeloveka, k kotoromu obratit'sja.
      I in.the.end NEG found person to whom turn:INF.REFL
      'I did not find a person to turn to.'

Judgements about these examples vary. Lena Karvovskaya (p.c.) confirms Rappaport's judgements, while Aysa Arylova (p.c.) informs me that these are hardly acceptable for her, marking them as *?.

b. *Ja našel knigu (kotoruju) počitat'.
I found book:ACC (which:ACC) read:INF
'I found a book to read.'

Grosu (1987) was the first to explicitly criticize the application of the nominal analysis to Spanish (and Romanian). Grosu's paper is mainly a reply to Suñer (1983) and her treatment of matching effects. Suñer argues that in MECs, the *pro* that appears in the head position of the wh-clause is liberated from any licensing requirements. If matching effects are an overt reflection of an empty-category licensing relation, no matching effects are predicted for MECs—a correct result. Grosu points out that Suñer's analysis beats the very idea of licensing empty categories, a concept which is based on the well-grounded observation that the distribution of empty categories is very limited. Each empty category (such as *pro* or PRO) must participate in some well-defined relation/configuration, in other words, it must be syntactically licensed. From this perspective, Suñer's *pro* in MECs is a clear outlier and that is better to be avoided. It is conceptually cleaner, Grosu argues, to assume that *pro* is simply absent in MECs.

A number of empirical arguments support the general conclusion of Grosu's, most of which were already discussed and exemplified in §3.3.1 and §3.3.3 of Chapter 3. The gist of all the arguments dwells in the observation that MECs lack characteristic nominal properties. In particular, (i) they have a very limited distribution (they are ruled out from most argument positions), (ii) they cannot be coordinated with other NPs, (iii) they lack complex-NP behavior in that they are transparent for extraction.[4] Let us illustrate at least the last two properties for Russian and Spanish

(6) **Coordination**

a. *Russian* (Aysa Arylova, Zhenya Markovskaya, p.c.)
U menja est' s kem rabotat' (* i sobaka).
at me:GEN be:IMPRS with whom work:INF and dog
'I have somebody to work with and a dog.'

b. *Spanish* (Luis Vicente, p.c.)
Estoy en un buen departamento: tengo con quién
am in a good department: have:1SG with who
colaborar (?? y una carga lectiva ligera).
collaborate:INF and a load teaching light.
'I am in a good department: I have somebody to collaborate with and a light teaching load.'

[4] A notable exception is Italian, as pointed out in §2.2.4. I will discuss the case of Italian in more detail in §5.3.3. Also, see Chung and McCloskey (1983) for a discussion of English examples where subject relatives are transparent for extraction:

(i) Chung and McCloskey (1983:708)
This is a paper that we really need to find someone who understands.

(7) **Transparency**

a. *Russian* (Rappaport 1986:13)
Drug drugu$_1$ nam bylo čto rasskazyvat' t$_1$
each other us:DAT be:PAST.IMPRS what:ACC tell:INF
'[To each other]$_1$ there was something for us to tell t$_1$.'

b. *Spanish* (Cintia Widmann, p.c.)
Con quién ya no tenés de qué hablar?
with whom already NEG have:2SG of what speak:INF
'Who is such that you no longer have anything to speak about with that person?'

Below are examples of headed relatives analogous to the MECs above. Notice that while Russian behaves as expected in that the relative blocks extraction, (8a), extraction out of Spanish infinitival headed relatives is perfectly fine, (8b). It might seem that this observation lends more support to Plann's analysis of Spanish MECs in terms of headed relatives. However, later on (§6.5) I will argue that this impression is unsubstantiated and that these apparent infinitival headed relatives should be analyzed as possibility clauses in the sense introduced in the previous chapter. Under that assumption, the quirky observation (8b) will follow.

(8) a. *Russian* (Aysa Arylova, Zhenya Markovskaya, p.c.)
*Drug s drugom u nas est' čto-to o čem
each with other at us:GEN be:IMPRS something about what
možno pogovorit'.
possible speak:INF
'[With each other]$_i$ there is something for us to speak about t$_i$.'

b. *Spanish* (Luis Vicente, p.c.)
Con quién ya no tienes nada de que
with whom already NEG have:2SG anything:NCI about what
hablar?
speak:INF
'Who is such that you no longer have anything to speak about with that person.'

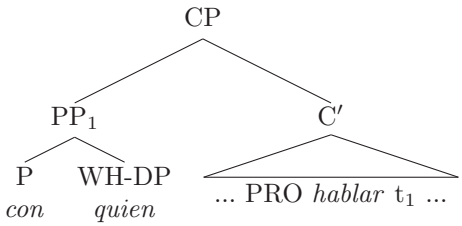
In sum, the conceptual argument based on the matching effects phenomenon, as well as the empirical problems reviewed above render the nominal analysis inadequate, at least for the languages for which they were proposed. Also the prospects of applying the analysis to other languages are meager. As I showed in Chapter 2, the lack of matching effects in MECs is an absolute universal and the high transparency of MECs is a very strong cross-linguistic tendency. Both of these facts suggest the absence of any empty nominal category on top of the MEC. In §5.3 I will discuss subtypes of MECs (in Italian and Hungarian) which create a strong impression of being headed by nominals. Yet, if the event-extension analysis is correct, no version of the nominal analysis can be upheld

even for these cases.

5.1.2 The clausal analysis

The clausal analysis builds up on the affinity of MECs with embedded questions. It was first proposed by scholars working on Slavic languages. The oldest proposal in this vein that I am aware of is a paper by Zubatý (1922) on Czech MECs. For Russian, the clausal analysis was first proposed by Garde (1976).[5] Russian MECs are analyzed as CPs (in current terms) also by Pesetsky (1982: Chapter 2, §4.4.1), even though he labels them infinitival free relatives. In particular, Pesetsky claims that "[t]he simplest hypothesis [...] is that both infinitival indirect questions and infinitival free relatives are S′s [i.e. CPs in today's terms], and do not differ in internal structure." (152) This analysis was later picked up by Grosu (1987) for Spanish and Romanian and independently arrived at by Rudin (1986: Chapter 6) for Bulgarian. Finally, the clausal analysis received wider attention thanks to the the subsequent work of Alexander Grosu (Grosu 1994; Grosu and Landman 1998; Grosu 2004) and especially Roumyana Pancheva-Izvorski (Izvorski 1998; Pancheva-Izvorski 2000). It was also adopted in the work of Ivano Caponigro (Caponigro 2001, 2003, 2004). For illustration, I include the following diagram representing the clausal analysis of the Spanish sentence in (1), i.e. *No tiene con quien hablar* 'I don't have anybody to speak with.' As you can verify, the analysis is minimally different from the nominal analysis in (2).

(9) *No tiene*



At present, it is safe to state that the CP analysis has become a well-accepted standard, despite the apparent controversies between the free-relative "camp" (Caponigro) and the embedded-question "camp" (Pancheva-Izvorski). This controversy is more ideological and terminological and has little to do with substance, where there is surprising agreement (see also §3.3.4).

What evidence is there in favor of the clausal analysis? It turns out that the evidence is almost entirely negative, collected to argue against the nominal analysis. We have seen most of it in the preceding section and in Chapter 3, so there is no point in unwrapping the whole argumentation once again.

Is there any positive evidence at all? The reason why most scholars do not even bother to give positive evidence for the CP-hood of MECs is the fact that every MEC involves wh-movement. By default, wh-movement targets an A-bar

[5] Unfortunately, I could not get hold of this paper.

position in the left periphery of the clause, which in turn is accommodated by the specifier of a C head (or, alternatively, some head in the split CP domain). Therefore, the presence of the CP projection follows. This conjecture is so strongly engrained in our syntactic theorizing that hardly anybody even considers it an issue that is worth discussing. However, I would like to bring this conjecture to the surface and give it a label:

(10) **The wh-movement/CP conjecture** (to be proven false)
Overt wh-movement entails the presence of a CP.

Before turning to a discussion of transparency phenomena that will eventually lead to the denial of (10), let us briefly discuss the problem of selection.

Selection

In §5.1.1, I concluded that the fact that MECs are selected by noun-selecting verbs is one of the virtues of the nominal analysis. For the clausal analysis, on the other hand, the issue of selection is not so straightforward: How is it possible that verbs that normally subcategorize for NPs can subcategorize for CPs, too? As already pointed out in the introduction to this chapter, the event-extension analysis in fact predicts that MECs are verbal rather than nominal projections. Yet, selection is a genuine problem for all previous clausal analyses, so, for completeness, let us have a look at the range of answers offered in the literature.

Pesetsky (1982) argues that the MEC undergoes obligatory quantifier raising at LF. The trace left after this movement has a nominal status and can thus satisfy the selectional requirements of the matrix verb. This solution is relatively elegant; however, we will see that a quantifier-raising analysis makes a number of highly problematic predictions (see §6.1.1). Rudin (1986) solves the problem by positing a lexical ambiguity. She suggests that MEC-selecting verbs systematically come in two versions differing in subcategorizational patterns: [_ NP] and [_ CP]. Another potential solution is to adopt a system where syntactic subcategorization is dispensed with altogether, giving way to semantic selection (i.e. s-selection; cf. Grimshaw 1979).[6] Thus, Caponigro (2003) argues that MECs, categorially CPs, denote a one-place predicate and are therefore of type $\langle e, t\rangle$, which is also the type of predicative NPs The last type of answer is provided by Pancheva-Izvorski (2000). She proposes that MECs are not directly selected by the existential predicate, but rather by a covert modal head. Under this approach (a version of which can also be found in Šimík 2009a), it comes as natural that MECs are CPs, as CPs are standard syntactic input into a whole class of modal and intensional verbs.

[6]This system presupposes that there is no strict correspondence between syntactic categories and semantic types, a restriction operative e.g. in Montague (1970, 1973). Nowadays, it is standard to assume that no such strict correspondence holds (see e.g. Partee and Rooth 1983; Partee 1987).

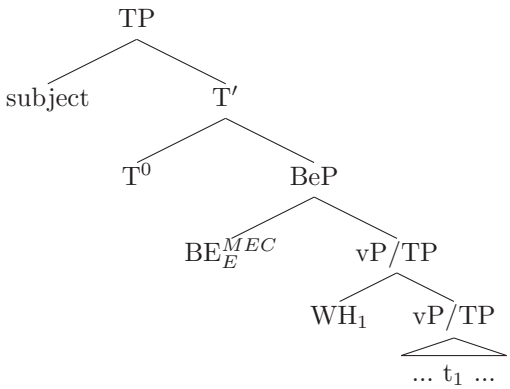
5.1.3 Summary

On the basis of empirical and theory-internal arguments presented in this section, I conclude that the CP analysis is more adequate than the DP/NP analysis and has a greater explanatory potential, despite the lack of clear positive evidence in its favor. This is a welcome result, as its general format matches the prediction of the event-extension analysis, under which MECs are event extensions. In the next section, I turn to the discussion of transparency phenomena, which pose problems for the generality of the CP approach and the conjecture (10), on which it heavily relies.

5.2 Restructuring phenomena: not all MECs are CPs

In this section, we will see that the popular CP analysis is in fact too restrictive. Based on the evidence from a variety of transparency and restructuring phenomena in a number of languages, I will argue that some MECs have to be analyzed as TPs or vPs and accordingly, their embedder belongs to the class of restructuring predicates. I will call such MECs *restructuring MECs.*

(11)



Even though it has never been fully developed, the suggestion that MECs can be smaller than CPs is not new. It was first tentatively proposed by Chvany (1975) for Russian, followed by Avgustinova (2003), Kondrashova (2008) and Kondrashova and Šimík (to appear). For Czech, this analysis was first hinted at in a footnote in Lenertová (2004), and later argued for by Ceplová (2007) and Šimík (2008a, 2009a). It was also tentatively proposed for Hungarian by Lipták (2003) and Surányi (2005).

In §5.2.1 I introduce the problem in the form of three observations involving clitic climbing (in Czech and Serbo-Croatian), genitive of negation licensing (in Slovenian), and wh-incorporation into the matrix negative marker (in Russian). In §5.2.2 I give a brief background on the phenomenon of restructuring. §5.2.3

is a failed attempt to save the CP analysis by trying to adopt one of two theories of restructuring which allow clitic climbing over a CP boundary. The conclusion that MECs need not be CPs raises further questions: What kind of restructuring predicate selects the MEC? What kind of wh-movement does the restructuring type of MEC employ, if the CP layer is missing? What determines the amount of structure that a language requires to build a grammatical MEC? These questions are addressed in subsequent sections, namely 5.3 and §5.4.

5.2.1 Stating the problem

There are a number of phenomena that pose a problem to the run-of-the-mill CP analysis of MECs. In this subsection, I will illustrate three of them: (i) some MECs in some languages are transparent for clitic climbing; (ii) the matrix negation in Slovenian triggers genitive of negation on the embedded object; and (iii) in Russian, the wh-word can incorporate into the matrix negative marker.

Clitic climbing

As already recorded in §2.2.4, some languages allow for clitic climbing out of infinitival MECs. The relevant examples are repeated in (12). See also (13), which shows that clitic climbing out of infinitival questions is impossible (cf. Junghanns 2002).

(12) a. *Serbo-Croatian* (Pancheva-Izvorski 2000:53)
Nemam ga$_1$ [kome dati t$_1$].
NEG:have:1SG it:CL whom give:INF
'I have no one to give it to.'

b. *Czech* (Ceplová 2007:37)
Petr ho$_1$ má [kam pozvat t$_1$].
Petr him:CL has where invite:INF
'Petr has a place where he could invite him.'

(13) a. *Serbo-Croatian* (Šimík 2009a:188)
*Neznam to$_1$ [kome dati t$_1$].
NEG:know:1SG it:CL whom give:INF
'I don't know who to give it to.'

b. *Czech* (Zubatý 1922:66)
*Vím se$_1$ [kam posaditi t$_1$].
know:1SG REFL.CL where seat
'I know where to sit down.'

However, not all languages that generally allow for clitic climbing allow it to happen in MECs, as witnessed by Romance languages. The example below demonstrates this for Portuguese, where the clitic *me* 'myself' has to attach to the embedded infinitive and can by no means move outside of the MEC:

(14) *Portuguese* (Adriana Cardoso, p.c.)
a. Tenho com que me entreter.
have:1SG with that myself:CL amuse:INF
'I have with what to amuse myself.'
b. *Tenho-me com que entreter.
have:1SG-myself:CL with what amuse:INF

In sum, the phenomenon of clitic climbing divides MECs into two types: opaque and transparent. The former type matches the behavior of infinitival questions and can therefore be easily captured by the CP analysis. For the latter type, the plain CP analysis is inadequate. I can see two logical ways of improving the inadequacy. Either we modify the CP analysis so that clitic climbing becomes available in exactly the cases where it should be, i.e. in Slavic MECs selected by 'be/have', or we abandon the CP analysis for those cases. After providing a background on restructuring phenomena in general (§5.2.2), I will argue that the universal CP position needs to be abandoned (§5.2.3).

Slovenian genitive of negation

Slovenian makes a productive use of so called genitive of negation, i.e. a structurally case-marked (in particular accusative) argument surfaces as genitive in case it is in the scope of sentential negation. Some examples are below.

(15) *Slovenian* (Marko Hladnik, p.c.)
a. Nameraval sem pisati diplomo.
planned be:1SG write:INF thesis:ACC
'I planned to write a thesis.'
b. Nisem nameraval pisati diplome.
NEG:be:1SG planned write:INF thesis:GEN
'I didn't plan to write a thesis.'

Even though some transparency is allowed, as shown by the examples above, where the sentential negation is associated with the verb *nameravati* 'plan' rather than the verb *pisati* 'write', the genitive of negation cannot be licensed across a clausal boundary. Thus, negating the verb *vem* 'know' does not trigger the genitive on the embedded *diplomo* 'thesis'.

(16) *Slovenian* (Marko Hladnik, p.c.)
Ne vem kdaj pisati { diplomo /* diplome}.
NEG know:1SG when write:INF thesis:ACC / thesis:GEN
'I don't know when to write the thesis.'

However, in an analogous MEC, the genitive of negation is obligatory, as illustrated by the ungrammaticality of the accusative argument *knjigo* 'book':

(17) *Slovenian* (Marko Hladnik, p.c.)
Včeraj mu nisem imel kdaj dati {* knjigo / yesterday him:CL NEG:be:1SG had when give:INF book:ACC / knjige}.
book:GEN
'Yesterday I didn't have any time to give him a book.'

Thus, we observe that with respect to the licensing of genitive of negation, Slovenian MECs behave on a par with complements of restructuring verbs like 'plan' rather than questions embedded under 'know'. By the way, the position of the clitic *mu* 'him' in (17) also illustrates that Slovenian MECs are transparent for clitic climbing.

Russian neg-wh items

The following are examples of Russian MECs:

(18) *Russian* (Apresjan and Iomdin 1989)
a. Budet gde spat'.
be:FUT where sleep:INF
'There will be a place to sleep.'
b. Ne budet gde spat'.
NEG be:FUT where sleep:INF
'There will be no place to sleep.'

Clearly, it is possible to form the negative version (18b) simply by adding a negative marker *ne* to the matrix existential verb, *budet* 'will be' in this particular case. However, this apparently standard way of building "negative MECs" is claimed to be colloquial (Apresjan and Iomdin 1989; Avgustinova 2003), or even impossible (Chvany 1975). The primary and prescriptively preferred way to express the truth-conditions of (18b) is (19):

(19) *Russian*
Budet negde spat'.
be:FUT NEG:where sleep:INF
'There will be no place to sleep.'

In this case, the wh-word *gde* 'where' and the negative marker *ne* form a single unit, which I will refer to as the *neg-wh item* (following Kondrashova and Šimík to appear). The challenge for the CP account is: How is it possible that a negative marker construed in the matrix clause ends up being spelled-out together with the wh-word in the embedded SpecCP? There is an apparent easy way out: the integration of the two morphemes happens postsyntactically, say in the PF component or in morphology. There are two serious problems with this analysis (pursued e.g. by Babby 2000 and Grosu 2004). First, the neg-wh item behaves as a word/constituent in syntax. In the following example, the neg-wh item *nekomu* 'neg-who' precedes a sentential adverb construed in the matrix

clause. On the postsyntactic incorporation account, it is hard to see how the neg-wh item could reach its surface position.

(20) *Russian* (Šimík 2009a:188)
Nekomu navernoe Saše ego otdat'.
NEG:who:DAT perhaps Saša:DAT it give:INF
'Perhaps, Sasha has no one to give it to.'
*'Sasha has no one to whom she can perhaps give it.'

This fact suggests that the neg-wh item is not just a morphonological unit, but also a syntactic unit. There are two ways to go about this. The first option is to analyze the neg-wh item as a pre-syntactic complex (a word) that enters the syntactic derivation ready-made—an account on which the CP analysis could perhaps be upheld. The problem with this type of analysis (pursued e.g. by Rappaport 1986 or Avgustinova 2003) is that it creates a great discrepancy between the structure of "canonical MECs" and "neg-wh MECs" and offers no principled account of the systematic similarities between them (see Kondrashova and Šimík to appear for discussion). The second option is to maintain the incorporation account, under which the wh-word incorporates into the matrix negation. Then, however, we are left with the theoretically problematic concept of syntactic incorporation over a CP boundary. If, on the other hand, Russian MECs are not CPs, an idea that goes back to Chvany (1975), such incorporation should be straightforward.

5.2.2 Background on restructuring

The transparency phenomena discussed above take place in so-called restructuring contexts. Under most current approaches (cf. Wurmbrand 2001; Cardinaletti and Shlonsky 2004; Cinque 2006) the term restructuring refers to a situation where two predicates share a single functional structure, which c-commands both of the predicates and consequently appears to belong to the higher one, often called a *restructuring verb*. Some licensing requirements of the embedded predicate then can be discharged against this shared functional structure. Apart from the phenomena discussed above, such structure sharing has been argued to underlie phenomena like auxiliary switch, long NP movement, and long-distance agreement:

(21) a. **Auxiliary switch** (*Italian;* Cardinaletti and Shlonsky 2004:522)
Ci { sarei /* avrei} voluto andare con Maria.
there would.be / would.have wanted go:INF with Maria
'I would have wanted to go there with Maria.'

b. **Long A-movement** (*Italian;* Roberts 1997:424)
[Le nuove case]$_1$ si cominceranno a costruire t$_1$
the new houses REFL start:FUT to build
'The new houses will start being built.'

c. **Long-distance agreement** (*Czech;* Dotlačil 2004:15)
Na Zelený čtvrtek se doporučovala jíst
on green thursday REFL recommend:PAST.PART.FEM eat:INF
zelená strava.
green:NOM.FEM food:NOM.FEM
'It was recommended to eat green diet on Green Thursday [Thursday before Easter].'

(21a) shows that in the context where the modal *volere* 'want' selects for a VP headed by the predicate *andare* 'go', the auxiliary verb is not *avere*, as 'want' would have it, but rather *essere* 'be', as required by 'go'.[7] (21b) is an example of an A-movement accompanying the process of reflexive passivization. This movement can take place even though the object belongs to the lower verb *costruire* 'build' while it is the higher verb *cominceranno* 'start' that is passivized. Finally, (21c) is a corresponding example, only involving agreement rather than movement. The reflexively passivized verb *doporučovat* 'recommend' embeds a transitive verb like *jíst* 'eat', whose direct object *zelená strava* 'green diet' can enter into a long distance case/agreement relationship with the functional material realized on the verb 'recommend'. In that case the object is in nominative (rather than accusative, as objects of 'eat' normally are) and the verb 'recommend' agrees with it in gender (feminine).[8]

In the next subsection, I push the apparently problematic hypothesis that MECs are universally CPs to its limits. I will concentrate on one of the restructuring phenomena, namely clitic climbing, and will try to determine whether it is tenable to assume that clitics in the relevant languages (Czech, Serbo-Croatian) climb across a CP boundary.

5.2.3 Restructuring across a CP boundary?

If MECs are to be always CPs, one has to allow restructuring over a CP boundary. There is a class of approaches, represented by Kayne (1989) or Roberts (1997) where precisely this is allowed. Let us have a look at these theories in a greater detail.

Both authors share the assumption that clitic climbing is in some sense facilitated by head movement. Following Rizzi (1982), Kayne proposes that climbing in fact *is* head movement, where clitics move from within the embedded VP, adjoin to I and then move through C to the matrix I. V-heads are allowed to be skipped because they are L-marked and therefore form no barriers for head-movement. Roberts, on the other hand, proposes to assimilate clitic climbing to long A-movement. He follows Sportiche (1992), who argues

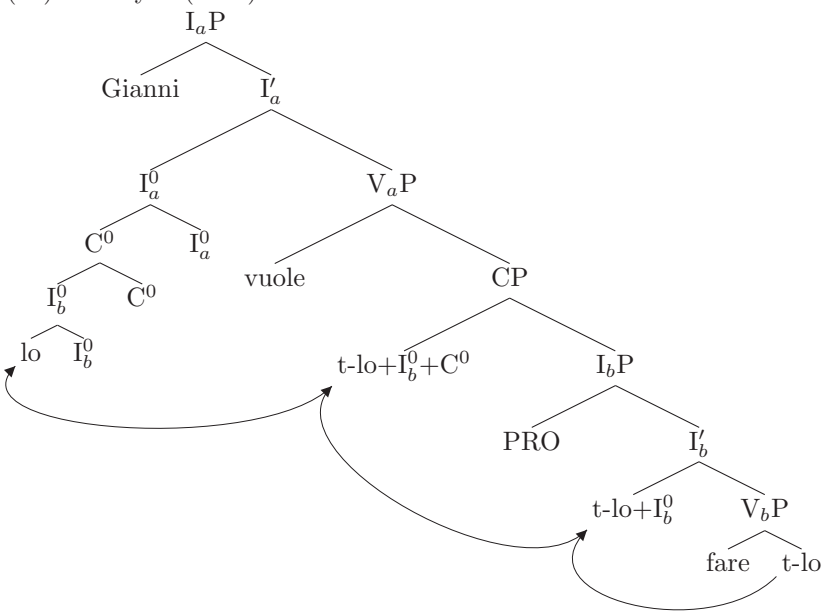
[7] The auxiliary switch in Italian is obligatory if it is accompanied by clitic climbing, as in (21a), and optional otherwise.

[8] Both long distance A-movement in Italian and long distance agreement in Czech are optional. If these don't take place, the restructuring verb is impersonal (displays default agreement) and the object is in the accusative case.

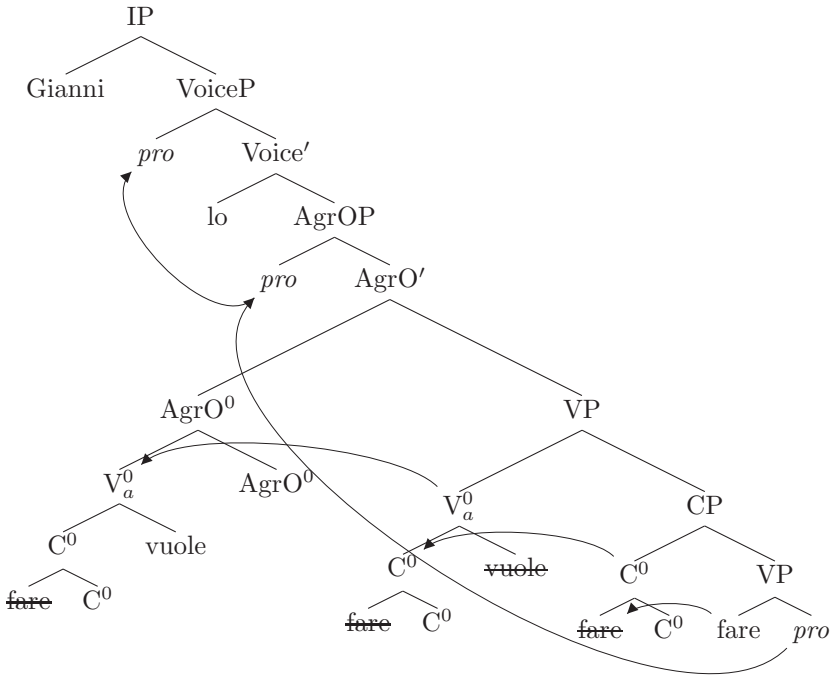
that what appears to be clitic movement is in fact only a sequence of two movements of an empty *pro*, which has a phrasal status: first, it A-moves to some SpecAgrP position, triggering agreement (in particular participle agreement), and then it A-bar-moves to SpecVoiceP, checking the features of the Voice head, which is placed between I and C and which gets spelled out as the clitic. In case of clitic climbing, the *pro* undergoes a long A-movement, which is facilitated by the movement of the embedded verb into the matrix clause. The two accounts are illustrated in (23) and (24) on the example (22) (irrelevant details and projections are left out):

(22) Gianni lo vuole fare.
Gianni it:CL wants do:INF
'Gianni wants to do it.'

(23) Kayne (1989)



(24) Roberts (1997)



Notice that Roberts assumes the copy theory of movement (Chomsky 1995). The fact that the embedded verb *fare* is spelled-out much lower than expected under the standard copy theory, is a result of an interplay of two PF filters: (i) two morphological words can never be spelled-out in one head-position, (ii) a head is spelled out at the highest L-related position possible. The former filter rules out the ungrammatical sequence *fare vuole* and the latter ensures that the verb is realized in the embedded clause rather than in the matrix. The interested reader should consult the original paper for further details.

This style of restructuring account is motivated by two observations. Firstly, some control verbs belong to the class of restructuring verbs, e.g. 'want'. Control verbs require a PRO subject. In pre-minimalist theories (to which Kayne's, and partly Roberts' belong), PRO was only licensed in ungoverned positions (Chomsky 1981, 1986). This in turn required the presence of a CP barrier between the PRO and the matrix verb. Secondly, it has been known since Rizzi (1978, 1982) that clitic climbing is marginally allowed out of Italian wh-infinitivals. Coupled with the wh-movement/CP conjecture (10), this observation leads to the conviction that restructuring over CP boundaries is a sheer necessity.

(25) *Italian* (Rizzi 1982:36)
Non ti_1 saprei [che dire t_1].
NEG you:DAT would.know what say:INF
'I wouldn't know what to tell you.'

However, these two arguments turn out to be rather weak. In current theories, where the notion of government is largely dispensed with, PRO can be licensed even without a CP "barrier", simply by a relation (such as spec-head or agreement) with a defective (infinitival) T head (cf. Chomsky and Lasnik 1993). This theory-internal argument for restructuring over CP boundaries therefore lost its strength with the advent of minimalism. Also, the status of the example in (25) is somewhat dubious. As already noted by Rizzi (1978), this construction is severely limited in productivity. Furthermore, Cinque (2006) argues that such transparency of wh-questions is only possible if the verb 'know' has a modal reading akin to 'be able', i.e. (presumably) 'I wouldn't be able/couldn't tell you anything' for (25). If this is true, (25) is hardly a case of an embedded question at all.[9]

Leaving the motivation aside, let us see whether either of these two accounts is fit for Czech and Serbo-Croatian clitic climbing. Kayne's account is problematic because it relies on the idea that clitics adjoin to verbal projections. This is substantiated for Romance languages and a small subset of Slavic languages (Bulgarian and Macedonian) where clitics indeed always cliticize onto verbs. However, Czech and Serbo-Croatian have second-position (2P) clitics, i.e. they

[9]A strikingly parallel situation obtains in Hungarian. As observed by Lipták (2003, p.c.), the verb *tud,* which is ambiguous between 'know' and 'can', can receive a modal/existential interpretation, but only if it selects an infinitive (ia). This infinitive can be a wh-infinitive, argued by Lipták (2003) to belong to the class of MECs (ib). Even though run-of-the-mill MECs in Hungarian can be in subjunctive mood (iia), this is not possible for wh-clauses embedded under *tud*, in which case they are interpreted simply as embedded questions (iib).

(i) *Hungarian* (Lipták 2003:3/4)
a. Péter tudott úszni.
Peter knew/could:3SG swim:INF
'Peter was able to swim. / Peter knew how to swim.'
b. Péter nem tudott mit felvenni.
Peter NEG could:3SG what:ACC put.on:INF
'Peter couldn't put on anything.'

(ii) *Hungarian* (Lipták 2003:3, p.c.)
a. Péter van kit küldjön a postára.
Peter is who:ACC send:SBJ.3SG the post.office.to
'Peter has someone whom he can send to the post office.'
b. Tudta, hogy mit olvasson.
knew:3SG that what:ACC read:SBJ
'He knew what to read/He knew what he should/can read.'
*'He had something to read. / He could read something.'

This suggests that the verb 'know' in Hungarian and Italian receives a modal/existential reading only if it is also a restructuring verb. For more discussion of aspects of Hungarian MECs, see §5.3.2.

cliticize to whatever word/constituent comes first in the clause, irrespective of its syntactic category. This is illustrated below where the auxiliary clitic *sam* 'be:1SG' and the pronominal clitic *joj* 'her:DAT' cliticize on an NP (26a) and a PP (26b).

(26) *Serbo-Croatian* (adapted from Franks and King 2000:28)

a. [NP Zanimljivu knjigu] sam joj kupio u
interesting book:ACC be:CL.1SG her:CL.DAT bought on
utorak.
Tuesday

b. [PP U utorak] sam joj kupio zanimljivu
on Tuesday be:CL.1SG her:CL.DAT bought interesting
knigu.
book:ACC
'I bought her an interesting book on Tuesday.'

This led researchers to assume that the movement of 2P clitics ignores verbal heads, at least in the strict sense imposed by head-movement. That is, 2P-clitics need not obey the head movement constraint (Travis 1984) and move independently as phrases.

Roberts' account fares better from this perspective because the landing site of the clitic movement does not in any direct way depend on the position of the verb. In fact, it is closely related to a number of proposals that are quite well accepted within Slavic linguistics (cf. Stjepanović 1998a,b; Bošković 2001; Boeckx and Stjepanović 2005; Migdalski 2006), under which clitic movement in 2P-clitic languages is essentially phrasal. It remains to be determined whether it is tenable to assume that clitic movement, albeit phrasal, can escape CPs. There is one obvious and another not so obvious reason why allowing clitic climbing out of CPs is not desirable. The obvious reason is that all structures where a CP is uncontroversially present, i.e. clauses containing an overt (finite) complementizer or wh-questions (whether finite or infinitival), happen to be opaque for clitic climbing. I illustrate this below for Czech.

(27) *Czech* (Junghanns 2000)

a. *Řekl mi_2 ho_1 že můžete ukázat t_2 t_1
said me:CL.DAT him/it:CL.ACC that can:2PL show:INF
'He said that you can show him/it to me.'

b. *Ale nevím ho_1 opravdu jak zapisovat t_1.
but NEG:know:1SG him:CL.ACC really how record:INF
'But I really don't know how to record him.'

Thus, a theory like Roberts', where climbing out of CPs is allowed faces a serious overgeneration issue. It would have to be supplemented with special mechanism rendering the absolute majority of (if not all) CPs opaque, thus overriding the general rule which makes them transparent.

The not-so-obvious reason why allowing clitics to climb out of CPs is discussed by Dotlačil (2007). Dotlačil argues that any movement that crosses a CP leads necessarily to a contrastive interpretation of the moved constituent, making it either a contrastive focus or contrastive topic (see Büring 2003 for a discussion of contrastive topics).[10] As it turns out, however, contrastiveness is precisely the property that a clitic must *not* have. Consider the following discourse, where the clitic *ho* 'him' refers to the salient referent denoted by *Jirka*. The context requires that in the sentence uttered by B the pronoun 'him' is to be interpreted in contrast to *Marie*. This is only possible if the pronoun is expressed in its full form *jeho* 'him', as in B′. Using a clitic, as in B, is infelicitous.

(28) *Czech* (Dotlačil 2007:88/89)

A Honza měl dva sourozence, Marii a Jirku. Koho z nich měl rád?
Honza had two siblings Marie and Jirka who of them had glad
'Honza had two siblings, Marie and Jirka. Which one of them did he like?

B #Nejradši ho měl.
most.glad him:CL had
'He liked him the most.'

B′ Nejradši měl jeho.
most.glad had him
'He liked HIM the most.'

In summary, the assumption that clitics can climb out of CPs and, more generally, that restructuring can take place over a CP boundary, is highly problematic on both empirical and conceptual grounds. Before wrapping up this section and moving on to MECs, I discuss the issue of clitic movement in some more detail, aiming to determine the target of clitic movement in 2P-clitic languages.

5.2.4 A note on clitic movement

In the last subsection I argued that clitics cannot move over a CP boundary. But where exactly do they actually move?[11] Since aspects of clitic placement will play a role in determining the exact structure of Czech MECs (see §5.4.2), it is desirable to set up at least a working account of clitic movement. I will follow Lenertová (2004) in assuming that clitic movement targets the domain

[10] A similar claim can be found in Frey (2005), who argues that contrastivity is implied in any left-peripheral movement (of which the long-distance movement out of CPs is just a subcase).

[11] The notably harder question of *why* clitics move is left open here, as it is not directly relevant for the issue of MECs. Opinions on this issue naturally vary. Some assume that clitic movement is essentially formal and can be modelled in terms of feature checking (Progovac 1993; Řezáč 2005), others hold that it is prosodically motivated (Bošković 2000).

immediately below Rizzi's (1997) FinP, which arguably marks the boundary between the contrastive and the non-contrastive domain of the clause.

Lenertová (2004) argues that clitics are capable of escaping TPs. The evidence for this comes from the grammaticality of clitic climbing out of infinitivals whose temporal specification differs from the matrix one. As argued by Wurmbrand (1998), the infinitival complement of 'decide' is a case in point. Notice that the event denoted by the embedded infinitive *ignorovat* 'ignore' is interpreted as temporally forward-shifted with respect to the matrix.

(29) *Czech* (Lenertová 2004:§4.1.1)
Místo toho se ho$_1$ rozhodl [$_{TP}$ příště ignorovat t$_1$].
instead that CL.REFL him:CL decided next.time ignore:INF
'Instead, he decided to ignore him next time.'

If the disjoint temporal specification entails the presence of a temporal variable in the embedded clause and if it is T that introduces this variable, it follows that the infinitival structure in (29) is (at least) a TP. Thus, clitics can move beyond TPs.

On the other hand, clitics cannot move beyond finiteness-related projections. This is clear from the ordering of auxiliary and pronominal clitics. Notice that the verbal auxiliary clitic *jsem* 'be' must precede the pronominal clitic *ho* 'him':

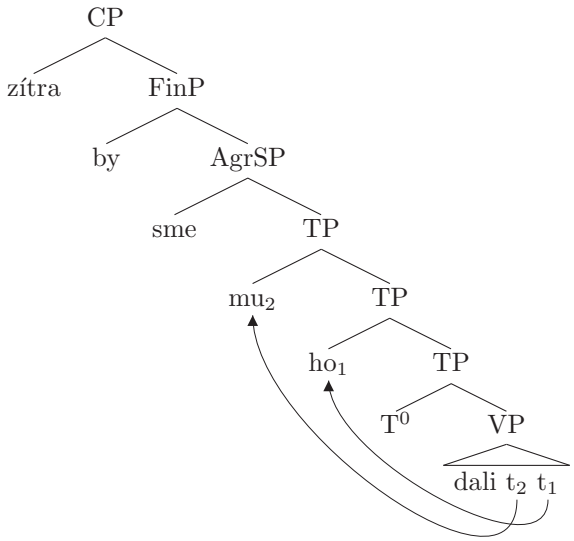
(30) *Czech*
Včera { jsem ho / * ho jsem} ještě chtěl pozvat.
yesterday be:1SG him:CL / him:CL be:1SG still wanted invite:INF
'Yesterday I still wanted to invite him.'

Following Lenertová (2004) (who in turn follows Toman 1999), I will take these facts at face value and assume that pronominal clitics can never cross finiteness-related projections, be it Rizzi's Fin, Chomsky's AgrS, or both. This significantly narrows down the area targeted by clitic movement. The tree in (32) gives the hypothesized structure for (31). For explicitness, I assume that the first constituent *zítra* 'tomorrow' occupies the left periphery (CP) and that the clitics *mu* 'him' and *ho* 'him/it' adjoin to TP. The presence of functional heads located between T and AgrS, whose specifiers host these clitics (in the spirit of Kayne 1994), is, of course a viable alternative. I leave this issue aside.[12]

(31) *Czech* (colloquial)
Zítra by-sme mu ho dali.
tomorrow would-1PL him:CL.DAT him/it:CL.ACC give:PAST.PART
'Tomorrow we would give it to him.'

[12] I use the Czech colloquial (but very wide-spread) form of the first person plural subjunctive morpheme *bysme* (instead of the standard but largely obsolete *bychom*), as it clearly reveals the division into two morphemes: the invariant subjunctive marker *by* and the first person plural auxiliary *jsme*, pronounced /sme/ (which in turn surfaces as [zme] due to voicing assimiliation). Both *by* and *(j)sme* behave as enclitics themselves.

(32)



It should not be forgotten that an analysis of clitic placement should not only determine where in the structure clitics appear but also why they have to appear in the second position. It is not difficult to imagine a structure like (32) with the missing first constituent, *zítra* 'tomorrow' in the case above, leading to a "clitic-first" configuration. On the other hand, the left periphery could also be expected to be able to accommodate more than just a single constituent, leading to a "clitic-more-than-second" configuration. There seems to be nothing in (32) that prohibits these configurations so we face the danger of overgeneralization. As shown by Lenertová (2004), however, these configurations are actually attested. Clitic-third phenomena appear quite naturally in embedded contexts in Czech. The constituent *kvalitní předlohu* 'good pattern' is (possibly contrastively) topicalized and is therefore placed in Rizzi's (1997) SpecTopP. Together with the subordinator *protože* 'because', they constitute two constituents, both of which precede the clitic *mu* 'him'.[13]

(33) *Czech* (Lenertová 2004:§2.1)
Měl štěstí, protože kvalitní předlohu mu poskytla sama
had luck because good pattern him:CL.DAT provided itself
historie.
history
'He was lucky because history itself provided him with a good pattern.'

Interestingly, the problem of "clitic-first" is not so serious either, as it occurs rather readily in the colloquial speech. Typically, these are cases of topic-drop, as in (34a), where there is, arguably, at least a syntactic presence of a constituent preceding the clitics in the CP domain. However, this is not necessarily

[13]Czech never fronts both focus and topic in one clause, as e.g. Italian. Therefore, "clitic fourth" phenomena are not expected to be attested.

the case; notice that there is no obvious candidate for dropping in (34b), as all arguments are expressed overtly. Lenertová (2004) speculates that it is an agreeing expletive *on* 'he' that is dropped (see Řezáč 2004:Ch4 for a discussion of this agreeing expletive). While I agree with Lenertová that the clitic-first version of (34b) is functionally closely related to the alternative with the overt expletive *on*, this hypothesis is clearly very hard to verify. Moreover, inserting an *expletive* element just to save the clitic-second (or clitic-non-first) generalization and subsequently dropping it seems rather dubious. It is therefore possible that clitic-first exists as a genuine phenomenon in Czech, though it manifests itself only in colloquial speech.

(34) *Czech* (Lenertová 2004:§2.4)

a. ~~To~~ bych neřekl.
that would:CL.1SG NEG:say
'I wouldn't say that.'

b. ~~On~~ se mi včera narodil kluk, tak jsme
he:EXPL REFL.CL me:CL.DAT yesterday born boy so be:1PL
trochu oslavovali.
a.bit celebrated
'My son was born yesterday, so we celebrated a bit.'

I conclude that the highly constrained analysis of clitic placement in (32), adapted from Lenertová (2004), is descriptively adequate for Czech. The analysis will become relevant for determining the structure of a subtype of Czech infinitival MECs characterized by the absence of clitic climbing (see §5.4.2). Besides corroborating the present analysis, I will strengthen one of the assumptions made here, namely that clitics *can* climb out of the TP, to the conclusion that clitics *must* climb out of the TP.

5.2.5 Conclusion

The goal of the present section was to try to defend the universal applicability of the standard CP-approach to MECs, despite the observation that MECs exhibit various transparency phenomena, including clitic climbing, which I discussed at length. Two accounts were discussed in which clitics can climb out of CPs, in particular Kayne (1989) and Roberts (1997). It turned out that only the latter could in principle be fit for the present purposes. The reason was that it assumes that clitics move as phrases rather than heads, which, arguably, is the case in the class of Slavic languages where clitic climbing out of MECs is witnessed. Despite the overall compatibility of Roberts' account with the facts, I argued that clitic climbing out of CPs should be avoided on independent grounds. Firstly, allowing clitics to climb out of CPs leads to a massive overgeneration. Secondly, as argued by Dotlačil (2007), clitic movement out of a CP would be expected to lead to a contrastive interpretation of the clitic, a kind of construal that is inherently incompatible with clitics. In the final subsection,

I followed Lenertová (2004) in adopting a syntactically constrained analysis of clitic placement, under which clitics cannot reach any position above FinP but can reach a position above TP.

The conclusion that restructuring MECs are not CPs has one specific and one general consequence. The specific consequence is that a unified treatment of the internal syntax of MECs must be given up. It will be the task of the rest of this chapter (mainly §5.3 and §5.4) to determine the range of possible structures of MECs cross-linguistically. The general consequence is that the wh-movement/CP conjecture introduced in (10), and repeated below, is untenable.[14]

(35) **The wh-movement/CP conjecture** (proven false)
Overt wh-movement entails the presence of a CP.

The falsification of the wh-movement/CP conjecture resonates with the flexible approach to wh-movement envisioned in the introduction to this chapter. Wh-movement as such is unconstrained—arguably a consequence of the semantic combinatorial flexibility of fronted wh-words. The only restrictions have external sources, such as general constraints on movement or selectional restrictions of the operators that exploit the wh-operator-variable dependency.

The present conclusion also bears an indirect consequence for the syntax-semantics interface of wh-interrogatives. Judging on the criterion of clitic climbing, MECs need not be CPs, while wh-questions *must* be CPs (see the contrast between (12) and (13)). Given that a non-CP wh-dependency strategy is independently available, the question arises why (single) wh-questions can never use this strategy. This question receives a straightforward answer in systems where wh-questions require the application of a specialized question operator and where this operator has a predetermined position in the functional sequence of the clause. On the other hand, the problem remains mysterious in approaches to question semantics that make no use of question operators, for instance the structured proposition approach (e.g., von Stechow 1991), under which a question is represented simply as a lambda-abstract (and hence similarly to MECs). Unless further constrained, such approaches do not prevent interrogative wh-dependencies to be established lower than at the CP level. One could argue that the relevant constraint prohibiting the formation of vP-level questions is the the non-existence of question embedding restructuring verbs. Even though this is a plausible hypothesis, it turns out to be wrong, as witnessed by the Czech verb *rozhodnout se* 'decide'. This verb can select both declarative and interrogative clauses; however, only in the former case it behaves as a restructuring verb: clitic climbing out of interrogatives is ruled out.

[14]See also Pancheva (2010), who argues that wh-operator-variable dependencies in Slavic phrasal comparatives are established at the level of vP rather than CP.

(36) *Czech*

a. Včera se { ho} rozhodl odkázat { ho}
yesterday REFL it:CL.ACC decided bequeath:INF it:CL.ACC
synovi.
son:DAT
'Yesterday he decided to bequeath it to his son.'

b. Včera se {* ho} rozhodl komu { ho}
yesterday REFL it:CL.ACC decided who:DAT it:CL.ACC
odkázat.
bequeath:INF
'Yesterday he decided to whom to bequeath it.'

I conclude that the contrast between embedded questions and MECs in terms of the size of the syntactic structure they require constitutes an interesting argument in favor of question-operator-based theories of interrogatives.

5.3 Wh-movement

The previous section established that MECs can be of different sizes, or more precisely, that they do not always have to be full-fledged CPs, despite the fact that they exhibit wh-fronting. This flexibility follows from the conjunction of hypotheses adopted in this thesis. First, I have argued that the MEC-embedding predicate is of lexical rather than functional nature. As such, its selectional requirements are relaxed. Second, wh-movement is free to target any position, as soon as it is allowed by independent principles of grammar and possibly language-specific constraints. The consequences of the first hypothesis will be discussed at length in §5.4. In this section, I will investigate the consequences of the second hypothesis.

The ultimate constraint on the type of syntactic structure that the MEC-embedding predicate BE_E^{MEC} can select is semantic: it has to be of the right type, in particular a type characterizing a relation between individuals and events ($\langle s, \langle e, vt\rangle\rangle$). I leave aside the problem of how the event variable gets abstracted over and concentrate on the abstraction over the individual variable. This abstraction is mediated by wh-movement in MECs. The particular kind of wh-movement is predicted to be unimportant, as soon as it serves the purpose of creating the abstract. We will see that this prediction is in principle borne out, even though eventually, relevant language-specific restrictions will have to be found in order to prevent overgeneration.

We will see that languages divide into a number of categories depending on which type of wh-movement their MECs exhibit. The most common type, by far, is the interrogative-like wh-movement. The properties of this type of movement in MECs are familiar (see esp. Pancheva-Izvorski 2000) and I will therefore not discuss it at any length. Yet, the discussion of Hungarian (§5.3.2) will reveal some interesting differences between actual interrogatives and interrogative-like

MECs, which follow from the fact that only the former constructions are genuine interrogatives (i.e. are selected by the Qu operator). A less common type is wh-movement to the edge of the vP/VP, discussed in §5.3.1. This type of movement is exploited in MECs of all languages that allow for short scrambling of indefinite pronouns (called here indef movement). It turns out that it is exactly these languages (mostly Slavic languages) whose MECs are particularly likely to exhibit restructuring phenomena. The most uncommon and yet attested type of wh-movement is relative operator-like wh-movement, discussed in §5.3.2 in close comparison to the interrogative type of movement. It was discovered by Lipták (2003) in her manuscript on Hungarian MECs and has gone virtually unnoticed since then. That this type of movement might not be limited to Hungarian is suggested in §5.3.3, where I discuss some relevant properties of Italian MECs and MECs selected by dynamic predicates. For discussion of multiple wh-fronting in MECs see §6.3.

5.3.1 Short wh-movement: the case of some Slavic languages

In §5.2 I observed that some Slavic MECs display restructuring effects such as clitic climbing, which led me to argue that MECs can lack the CP layer. This implies that the wh-movement in restructuring MECs must target some relatively low projection, presumably the edge of the vP. In this subsection, I will first show that the class of languages that have restructuring MECs is also characterized by making two other types of short movement available: a short wh-movement in multiple interrogatives and a scrambling-like movement of indefinite pronouns, which I will call indef-movement. These two types of movement have been associated before and I will hypothesize that wh-movement in restructuring MECs should be assimilated to them, too.

The restructuring MEC generalization

Let us start with the following Serbo-Croatian examples. The contrast between (37a) and (37b) shows that in Serbo-Croatian multiple questions, only one wh-word moves all the way to the left periphery; the other one moves to a lower position. In a similar vein, Serbo-Croatian indefinite pronouns such as the weak negative polarity item (NPI) *ikoga* 'anyone' in (36) (but also the negative concord item (NCI) *nikoga* 'anyone' and positive polarity item (PPI) *nekoga* 'someone'; see the literature cited) are fully acceptable only in scrambled positions. Let us call the movement they undergo indef-movement.

(37) *Serbo-Croatian* (Rudin 1988:453/454)

a. Ko$_1$ želite da vam šta$_2$ t$_1$ kupi t$_2$
who:NOM want:2PL SBJ you:DAT what:ACC buy:3SG

b. *Ko$_1$ šta$_2$ želite da vam t$_1$ kupi t$_2$
who what want:2PL SBJ you buy:3SG
'Who do you want to buy you what?'

(38) *Serbo-Croatian* (Progovac 2005b:36)
a. Da li je on ikoga uvredio?
that Q is he anyone insulted
b. ?Da li je on uvredio ikoga?
that Q is he insulted anyone
'Did he hurt anybody's feelings?'

Both of these facts also hold of Czech.[15] Consider the following examples. In the multiple question formation (39), only one wh-word can move to the left periphery, the other has to stay within the TP. Similarly, the default position for unaccented indefinite pronouns is preverbal, (40).

(39) *Czech*
a. Co jste komu včera řekli?
what:ACC be:2PL who:DAT yesterday said
b. *Co komu jste včera řekli?
what:ACC who:DAT be:2PL yesterday said
'What did you say to whom yesterday?'

(40) *Czech*
a. Chtěl jsem se někomu omluvit.
wanted be:1SG REFL somebody:DAT apologize
b.*#Chtěl jsem se omluvit někomu.
wanted be:1SG REFL apologize somebody:DAT
'I wanted to apologize to somebody.'

As first explicitly pointed out in Rudin (1988), this type of short wh-movement contrasts with the situation in Bulgarian, where all wh-words front to the left periphery, (41).[16] Importantly, the lack of short wh-movement in multiple interrogatives correlates with the lack of indef-movement, as shown in (42).[17]

(41) *Bulgarian* (Rudin 1988:450; Kostadin Cholakov, p.c.)
a. Koj$_1$ kŭde$_2$ misliš če e t$_1$ otišŭl t$_2$?
who where think:2SG that is gone

[15]Polish and a number of other languages (Slovenian, Slovak) behave in the same way. For the syntax of multiple wh-questions see e.g. Wachowicz (1974); Cichocki (1983); Citko (1998) for Polish and e.g. Toman (1981); Veselovská (1993); Sturgeon (2007) for Czech. The short movement of indefinite pronouns is discussed in Citko (1998) for Polish and Kučerová (2007); Šimík (2009b) for Czech.

[16]Romanian behaves as Bulgarian, see Comorovski (1986).

[17]The word order in (42)B′ is not ungrammatical but rather infelicitous. This means that there are contexts or registers (such as poetry) where it is acceptable. The same holds of Czech, where the order corresponding to (42)B′ is the neutral one whereas (42)B is reserved for a narrow/contrastive focus reading of the indefinite. Therefore, the relevant contrast is observable only in broad-focus contexts.

b. *Koj$_1$ misliš če e kŭde$_2$ t$_1$ otišŭl t$_2$?
who think:2SG that is where gone
'Who do you think went where?'

(42) *Bulgarian* (Kostadin Cholakov, p.c.)
A Zašto e iznenadana Maria?
why is surprised Maria
'Why is Maria surprised?'
B Zaštoto e namerila nešto.
because is found something
B′ #Zaštoto e nešto namerila.
because is something found
'Because she found something.'

We see that there is a correlation between the availability of short wh-movement in multiple wh-questions and the availability of indef-movement. The former is available if and only if the latter is available. Let us now turn back to MECs. It turns out that precisely those languages that allow for short wh-movement and indef-movement, for instance Serbo-Croatian and Czech, also exhibit restructuring effects in MECs (such as clitic climbing; see §5.2.1).

(43) **Restructuring MEC generalization**
A language has restructuring MECs iff it has indef-movement.

The validity of the generalization in (43) cannot be tested on Bulgarian, which in general displays no restructuring phenomena. However, it is instrumental in the explanation of the behavior of languages like Italian, Spanish, and Portuguese, which generally do exhibit various restructuring phenomena, including clitic climbing. Yet, these languages completely prohibit clitic climbing out of MECs, as illustrated in (14) and repeated below.

(44) *Portuguese* (Adriana Cardoso, p.c.)
a. Tenho com que me entreter.
have:1SG with that myself:CL amuse:INF
b. *Tenho-me com que entreter.
have:1SG-myself:CL with what amuse:INF
'I have with what to amuse myself.'

Importantly, these languages also lack short wh-movement and indef-movement. This is illustrated for Portuguese in (45). Notice that the example (45b) is simply ungrammatical.

(45) *Portuguese* (Adriana Cardoso, p.c.)
a. Porque ele encontrou alguém.
because he found somebody

b. *Porque ele alguém encontrou.
because he somebody found
'Because he found somebody.'

These observations corroborate the restructuring MEC generalization in (43). The independent prohibition on short scrambling of indefinite pronouns and wh-words targets the wh-movement in MECs, too. Consequently, wh-movement in Portuguese MECs (and MECs of many other languages) must target the left periphery of the clause. Once a full CP is constructed, no restructuring phenomena, including clitic climbing, are allowed.

In summary, the availability of short wh-movement and indef-movement—a factor completely independent of the grammar of MECs—provides an important clue to why some languages form vP-level (restructuring) MECs while others do not. In addition, the above discussion strengthens the general hypothesis that there is nothing inherent to either MECs or the MEC-embedding predicate that would force MECs to be of a certain syntactic size. In general, if MECs can be smaller than CPs, they will be.

This subsection left many interesting questions unanswered, such as why some languages allow for short wh-movement and others do not, or what the exact properties of the short wh-movement are. The existing attempts (most notably Citko 1998, Progovac 2005a, 2005b, and Bošković 2008) have all relied on feature-checking systems of both short wh-movement and indef-movement. These accounts are inherently incompatible with the present overarching hypothesis that wh-movement is not motivated or constrained by feature-checking. It seems to me much more plausible that this type of movement is motivated by an interface requirement, presumably by the principles of accent-assignment. All the languages that have short wh-movement are word order-flexible and at the same time accent-rigid (cf. Vallduví 1992). In these languages, the grammar puts very few constraints on what can move where but at the same time imposes strict requirements on prosodic phrasing of sentences. This concerns especially the requirement that pitch-accented constituents surface in the right-most position. Since indefinite pronouns as well as wh-words are typically unaccented, they move out of their base-generated positions, in order to comply with the prosodic requirement. What is interesting is that this PF-motivated movement is discernible at LF in the form of lambda-abstraction. That seems to suggest that despite the potential interface-motivation for short wh-/indef-movement, the movement still needs to take place in syntax.

5.3.2 Two different landing sites: the case of Hungarian

Hungarian provides further interesting evidence that the wh-syntax of MECs does not necessarily match the one of interrogatives. In §2.2.2, we saw that for constructing MECs, Hungarian can use both bare wh-words, used in interrogatives, and wh-words prefixed by *a-*, which spell out relative operators. I will call these MEC-subtypes wh-MECs and a-wh-MECs, respectively. Both these

subtypes share the essential MEC properties. First of all, they have the same truth-conditional semantics, being construed as narrow-scope existential indefinites and express existential circumstantial modality. Moreover, both have a very limited distribution, characteristic of MECs, and their wh-operators display no matching effects. Consider the pair of examples below. The only apparent difference is the presence of the relative *a-* prefix on the wh-word in (46b) and its absence in (46a).

(46) Anikó Lipták (p.c.)

a. Nincs kivel beszéljek.
is:NEG who.with speak:SBJ.1SG

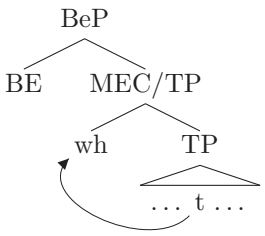
b. Nincs akivel beszéljek.
is:NEG REL:who.with speak:SBJ.1SG
'I don't have anyone to speak to.'

Despite the commonalities that make both constructions above MECs, there are also important differences. Following Lipták (2003), I will argue that a-wh-MECs have the internal syntax of free relatives (i.e. the syntax to the exclusion of the D-head that selects the wh-clause). According to the standard account of Hungarian (wh-)operator movement (see e.g. Lipták 2001 for an overview), interrogative operators move lower than relative operators (see also Rizzi 1997). The former is usually argued to target SpecFocP, the lowest projection of the split CP, while the latter moves higher than TopP, presumably SpecForceP. Even though I give up on the idea that wh-words themselves target some particular projections, I do keep the assumption that they can adjoin in particular positions for altruistic reasons—in order to facilitate the application of certain operators. The operators themselves, being functional categories, must be merged in a position predetermined by the (universal) functional sequence. Under this approach, it is therefore not surprising that different types of wh-operators (relative vs. interrogative) occur in different structural heights.

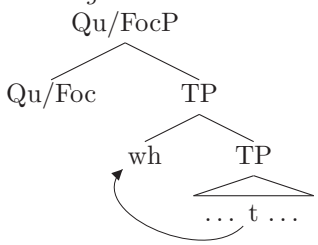
What Hungarian seems to show us is that different types of wh-movements (interrogative vs. relative) can be "mimicked" in MECs, giving rise to different kinds of MECs. It is only "mimicking" because as opposed to the genuine interrogative and relative wh-movements, there is no altruism in the MEC wh-movement. The wh-words move to certain positions simply because it is independently allowed by the grammar, not because it would be "motivated". The structures I propose for the two types of Hungarian MECs are below. In the case of wh-MECs, (47), the MEC is based on the internal structure of interrogatives, which is provided in (48). This means that the wh-word is adjoined to TP—the projection normally selected for by the question operator Qu, or, for the purpose of Hungarian, the focus operator Foc. In the case of a-wh-MECs, (49), the a-wh-word adjoins to the TopP, presumably the projection normally selected by the free relative D head (where D is arguably a flavor of the Force head), providing the definiteness. The corresponding free-relative structure is given in (50). Notice that the only difference between the two types

of MECs and the structures that they are "based on" is the absence of the the operators, Qu/Foc and D/Force, respectively.

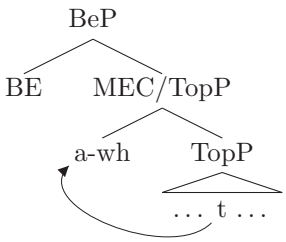
(47) *Wh-MECs*



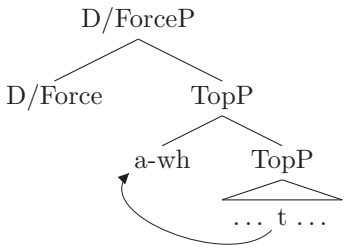
(48) *Interrogatives*



(49) *A-wh-MECs*



(50) *Free relatives*



In what follows, I will show that an interesting detailed prediction of the present approach is borne out. In particular, the two types of MECs are faithful to their "originals" with respect to the syntactic position and a number of other effects derived from that. However, they differ from them in respects that pertain to the selecting operator, which is present in interrogatives and relatives but not in MECs. Notice that we have already observed some of these effects for the a-wh-MECs: the absence of the D-operator is reflected in the absence of a definite construal and of case-matching effects. Below, we will see that a similar effect is observed also with wh-MECs.

Similarities

Below, I summarize all the similarities that hold between wh-MECs and interrogatives on the one hand, and between a-wh-MECs and free relatives on the other.

Similarity 1: Word order and cooccurrence restrictions When wh-operators cooccur with topicalized expressions, the latter will *precede* the wh-operator in case it is interrogative, i.e. adjoined to TP, and *follow* the wh-operator in case it is relative, adjoined to TopP. Under the present analysis, the same behavior is expected from wh-MECs and a-wh-MECs, respectively. The following examples, marking topicalized constituents by T-subscripts, corroborate this expectation. The examples in (51) make clear that a topicalized

phrase must precede a wh-word in MECs. The examples in (52) show the opposite behavior for a-wh-MECs.

(51) *Hungarian* (Lipták 2003:5/6)

a. Van [$_T$ a macskát] **kire** { bízni / bízzuk}.
is the cat:ACC who:SUBLAT trust:INF / trust:SBJ
'There is somebody who can keep an eye on my cat.'

b. *Van **mit** [$_T$ Maritól] tanulni.
is what:ACC Mary.from learn:INF
'There is something that one can learn from Mary.'

(52) *Hungarian* (Lipták 2003:6/7)

a. *Van [$_T$ a macskát] **akire** bízzuk.
be:IMPRS the cat:ACC REL:who:SUBLAT trustSBJ
'There is somebody who can keep an eye on my cat.'

b. ?Van **akit** [$_T$ a postára] elküldjünk.
is REL:who:ACC the post.office.to sent:SBJ.1PL
'There is somebody who we can send to the post office.'

Similarity 2: Locality The two types of MECs differ in their island-hood status. Wh-MECs are transparent for wh-extraction (53a) as well as VP topicalization (54a). A-wh-MECs are islands, as shown by (53b) and (54b).

(53) *Hungarian* (Lipták 2003:9)

a. Hova$_1$ nincs kit { küldeni / küldjünk} t_1?
where is:NEG who:ACC send:INF / send:SBJ.1PL

b. ?*Hova$_1$ nincs akit küldjünk t_1?
where is REL:who:ACC send:SBJ.1PL
'To which place don't we have anyone to send to?'

(54) *Hungarian* (Lipták 2003:9)

a. [odaadjam a pénzt]$_1$ nem volt kinek t_1
give:SBJ.1SG the money:ACC NEG was who:DAT

b. *[odaadjam a pénzt]$_1$ nem volt akinek t_1
give:SBJ.1SG the money:ACC NEG was REL:who:DAT
'As far as giving the money to anyone is concerned, I couldn't give it to anyone.'

Without going into details, it seems reasonable to assume that the ungrammaticality of extraction out of a-wh-MECs reduces to relativized minimality. The structure may well contain some projection (presumably TopP) that blocks A-bar movement.

Similarity 3: Sluicing It is well-known that relative operators, unlike interrogative operators, do not support sluicing (cf. Lobeck 1995; Merchant 2001). This (im)possibility of sluicing is often correlated with the syntactic position of the relevant wh-operator (see esp. Van Craenenbroeck and Lipták 2009).

(55) *Hungarian* (Anikó Lipták, p.c.)

a. Szeretnék elmenni, de nincs mikor.
would.like:1SG go:INF but is:NEG when
'I would like to go, but there is no time for it.'

b. *Szerettem volna küldeni Marinak valamit, de nem
liked:1SG COND send:INF Mari:DAT something:ACC, but not
volt amit.
was REL:what:ACC
'I'd like to send something to Mary but there is nothing I can send to her.'

Sluicing will also be discussed in §5.5.

Similarity 4: Multiple wh-words Only wh-MECs support multiple wh-words. This is expected, since multiple wh-MECs correspond syntactically to multiple interrogatives. Similarly, the existence of multiple operators in free relatives is cross-linguistically dubious and the ungrammaticality of multiple a-wh operators in MECs, illustrated in (56b), is therefore expected, too.

(56) *Hungarian* (Lipták 2003:10)

a. Van kit kire { bízni / bízzunk}.
is who:ACC who.to trust:INF / trust:SBJ.1PL
'Everyone can be trusted to someone.'

b. *Van amikor ahol aludjunk.
is REL:when REL:where sleep:SBJ.1PL
'There is a time and a place to sleep.'

Interestingly, Lipták (2000) argues that multiple free relatives actually exist in Hungarian. However, in her later work (Lipták 2004), she reassesses these constructions as multiple correlatives, whose existence is cross-linguistically attested and therefore not surprising (see, e.g., Dayal 1996).[18]

Differences

The relevant differences between a-wh-MECs and free relatives were already mentioned: a-wh-MECs, unlike FRs, do not display matching effects and are interpreted as indefinites. Both of these differences follow from the fact that only FRs are D-headed. Let us now concentrate on the differences between wh-MECs and interrogatives. I will attribute them to the fact that interrogatives but not wh-MECs (must) have the Qu/Foc operator. For control, I will also mention what the corresponding properties of a-wh-MECs with respect to free relatives are.

Difference 1: Position of the preverb The position of the so called "preverb" has been considered a very reliable diagnostics of focus fronting in Hun-

[18]See also Rudin (2008) for a discussion of examples that look like genuine multiple free relatives. Even these, however, are highly distributionally restricted, suggesting that what seems like a multiple free relative is in fact a free relative with a wh-indefinite in it.

garian. In the presence of focus fronting, including interrogative wh-fronting, the verb obligatory moves, stranding the preverb. In wh-MECs, contrary to wh-questions, this preverb-verb inversion is only optional. Notice that in (57) the preverb *el* either follows or precedes the verb *adjam* 'sell'.

(57) *Hungarian* (Lipták 2003:6/7)
Van kinek { eladjam / adjam el} a
is who:DAT PV:sell:SBJ.1SG / sell:SBJ.1SG PV the
kocsimat.
car:POSS.1SG.ACC
'There is somebody to whom I can sell the car.'

Yet, the inversion is not optional for all speakers, for some it is even ungrammatical.

(58) *Hungarian* (Surányi 2005)
Van mit { megosztani /* osztani meg}
be:IMPRS what:ACC PV:share:INF / share:INF PV
'I have something to share.'

A-wh-MECs, on the other hand, behave as expected in that the movement of a-wh-words does not trigger inversion, as illustrated in (59). This is expected, since no focus is involved.

(59) *Hungarian* (Lipták 2003:6/7)
Van akinek { eladjam /* adjam el} a
is REL:who:DAT PV:sell:SBJ.1SG / sell:SBJ.1SG PV the
kocsimat.
car:POSS.1SG
'There is somebody to whom I can sell the car.'

What causes the difference between wh-MECs and their corresponding interrogatives? Suppose that what is responsible for the verb-preverb inversion in wh-questions is not the wh-movement itself, but rather the application of the focus/question operator. Because there is no such operator in wh-MECs, no inversion is triggered.[19] Interestingly, this assumption is supported by the recent literature on Hungarian focus/wh-fronting, which often argues that it is not the fronting itself that is responsible for focusing, but rather the application of some operator (Horváth 2007; Cable 2008). If the verb-preverb inversion really correlates with focusing, then its presence in MECs is predicted to be at most optional.

Difference 2: Verbal mood Hungarian has no infinitival questions, as illustrated below.

[19]More precisely, there must not be a question operator, for obvious reasons, but there may be a focus operator. The reason is that wh-words in MECs can be focused. See also §5.5.

(60) *Hungarian* (Grosu 2004:421)
Tudom, hogy kit {* látni / lássak}.
know:1SG that who:ACC see:INF.1SG / see:SBJ.1SG
'I know who to see.'

Nevertheless, the infinitive mood is also readily used in wh-MECs (besides the subjunctive and the agreeing infinitive), as illustrated in (61a). A-wh-MECs behave like free relatives in that they only allow for a finite mood, in particular the subjunctive; see (61b).

(61) *Hungarian* (Lipták 2003:4)
a. Van kit { meghívni / meghívnunk / meghívjunk}.
is whom invite:INF / invite:INF.1PL / invite:SBJ.1PL
'There is somebody who we can invite.'
b. Van akit { meghívjunk /* meghívni}.
is whom:REL invite:SBJ.1PL / invite:INF
'There is somebody who we can invite.'

Under the present approach, this contrast between (60) and (61a) does not seem surprising at all. MECs and interrogatives are selected by a fundamentally different type of head. If (for some reason) the Qu head requires its complement to be finite, this property is not predicted to be shared by wh-MECs. Interestingly, a-wh-MECs retain the free relative property of being obligatorily finite, which seems to suggest that the finiteness property in free relatives have to do with the structural size rather than with the selector. I do not know why that should be the case.

Difference 3: Complementizer Wh-words in Hungarian embedded questions can be preceded by the complementizer *hogy* (62a), while free relatives cannot (62b). Grosu (2004) notices that MECs (in particular wh-MECs in the present terminology) behave on a par with free relatives rather than embedded questions (62c). A-wh-MECs, as expected, pattern with free relatives, too.

(62) *Hungarian* (Grosu 2004:421/422, Anikó Lipták, p.c.)
a. Tudom hogy kit lássak
know:1SG that who:ACC see:SBJ.1SG
'I know who to see'
b. Elek látta (* hogy) ami Anna előtt volt
Alec saw:DO (that) REL:what:NOM Anna before was
'Alec saw what was before Anna.'
c. Nincs kinek (* hogy) { írnunk / írjunk}
is:NEG who:DAT (that) write:INF.1PL / write:SBJ.1PL
'We have no one we can write to'
d. Nincs akinek (* hogy) írjunk
is:NEG REL:who:DAT (that) write:SBJ.1PL
'We have no one we can write to'

Grosu uses the above observation to support his claim that Hungarian MECs [i.e. wh-MECs] pattern "with interrogatives morphologically, and with relatives configurationally." (p. 422) Wh-words in MECs are like relative operators in that they target the CP and since the doubly filled COMP filter is operative in Hungarian, the occurrence of *hogy* is ruled out. However, we already know that this is not really true. It is indeed possible for Hungarian MECs to pattern with (free) relatives configurationally, but this only concerns a-wh-MECs and not wh-MECs. The effect above therefore calls for an alternative explanation.

It seems that the relevant observation falls out perfectly from the present account. The construction of MECs is completed right after the wh-movement and then it is directly selected by the MEC-embedding predicate BE. Given that the complementizer layer hosts various functional operators, it is clear that it must be missing from MECs.

Summary

I argued, following Lipták (2003), that Hungarian MECs come in two types. These two types share the core features of MECs, such as the narrow scope indefinite and existential modal construal and the absence of matching effects. However, they differ a number of morphosyntactic aspects, such as the morphology of the wh-operator, its positions in the functional spine of the clause, and locality. I argued that these two types arise as a sort of mimicry of the corresponding interrogatives and relatives. The reason why they only mimic the constructions is that they lack the operators (Qu and D) and are selected directly by the lexical MEC-embedding predicate BE. This mimicry aspect leads to a number of empirical discrepancies between wh-MECs and interrogatives on the one hand and a-wh-MECs and relatives on the other. In §5.4, I will return to a similar situation in Czech. In this language, wh-words can move either to the edge of vP or to the left periphery (the edge of FinP). Once again, this gives rise to two different types of MECs, which in this case are detectable by their control/raising properties.

5.3.3 Relative clause-like MECs

In the preceding section, we saw that Hungarian provides multifaceted and exceptionally clear evidence that the syntax of MECs does not necessarily mimic the syntax of interrogatives. This provides yet another argument against the universality of Pancheva-Izvorski's (2000) analysis. In this section, I will show that the relative-like structure of MECs is not a Hungarian quirk. In some languages, it seems to be exploited in MECs that are selected by dynamic MEC-embedders. Moreover, to the extent that the relevant arguments are applicable, the relative-clause strategy appears to be the primary one in Italian.

Dynamic embedding predicates

So far, I have mostly concentrated on the properties of MECs embedded under the stative predicates *be* or *have*. At a closer examination, it turns out that

some dynamic predicates (e.g. *send*) behave as though they were selecting a relative clause-like MEC, rather than an interrogative-like one. This is manifested by various phenomena such as the embedded mood, where some dynamic predicates require the use of subjunctives even if infinitives are generally allowed (Romanian; Alexander Grosu, p.c.), locality, where dynamic predicates are less transparent for extraction than stative ones, or sluicing, which is not supported by some dynamic predicates. The last two phenomena are illustrated below for Serbo-Croatian. The examples in (63) shows a contrast in acceptability between the extraction out of MECs selected by two dynamic predicates. While the MEC selected by *odabrao* 'chose', (63a), is transparent, the one selected by *poslao* 'sent', (63b), is not. The examples in (64) show a comparable contrast in the availability of sluicing. While sluicing in MECs selected by the stative *nimam* 'NEG:have', (64a), is perfectly acceptable, it is impossible in MECs selected by *poslala* 'sent', (64b).

(63) *Serbo-Croatian* (Jelena Prokić, p.c.)

a. Na ovu zabavu$_1$ nisam odabrao koga da pozovem t_1.
for that party NEG:be:1SG chose who SBJ invite:1SG
'I didn't choose anyone who I could invite for that party.'

b. *Šta$_1$ si mu poslao čime da popravi t_1?
what be:2SG him:DAT sent what:INST SBJ repair:3SG
'What is the thing that you send him such that he can repair something with that thing.'

(64) *Serbo-Croatian* (Jelena Prokić, p.c.)

a. Želela bih da idem na zabavu, ali nemam s
wanted be:1SG SBJ go:1SG to party but NEG:have:1SG with
kim.
who
'I wanted to go to the party but there was nobody to go with.'

b. *Hteo je da očisti auto ali mu nisam
wanted be:3SG SBJ clean:3SG car but him:DAT NEG:be:1SG
poslala čime.
sent what:INST
'He wanted to clean the car but I didn't send him anything (with which he could do it).'

Clearly, the properties of Serbo-Croatian MECs illustrated in the b-examples above correlate with the ones of Hungarian relative-like a-wh-MECs.

The case of Italian

As observed in Chapter 2, Italian MECs are opaque for extraction and do not allow for sluicing. The relevant observations are repeated below:

(65) *Italian* (Ivano Caponigro, p.c.)

a. *Chi non avevi dove far dormire?
who NEG have:PAST.2SG where let:INF sleep
'Who is such that you don't have a place where you could let him sleep.'

b. *Volevo andare al cinema con qualcuno ma non { avevo / c'era} con chi.
wanted:1SG go:INF to.the cinema with somebody but NEG had:1SG / there.be:3SG with whom
'I wanted to go to the movies with somebody but I didn't have / there wasn't anybody who I could go with.'

Even though this behavior is cross-linguistically rare, it correlates with Hungarian a-wh-MECs and MECs selected by some dynamic predicates. The question why Italian MECs should behave in this way is not easy to answer. One possibility is that they actually behave as questions and that Italian questions just happen to be configurationally like other languages' relatives. This idea receives some interesting support. Firstly, Italian is notoriously known by its property of disallowing multiple wh-questions (Calabrese 1984). Secondly, as opposed to the widely accepted claim of Rizzi (1997) (cf. Stoyanova 2009 for a recent implementation), Italian does not seem to utilize the focus projection for placing its wh-words, at least not in embedded questions. The evidence comes from Venetian, a dialect of Italian which is characteristic by licit violations of the doubly filled COMP filter. While contrastive foci in embedded clauses *follow* the complementizer *che* (66a), wh-words must *precede* it (66b), suggesting that they are placed in SpecCP rather than in SpecFocP.

(66) *Venetian Italian* (Van Craenenbroeck and Lipták 2009:§6

a. Credo { che} NANE {* che} i gabia visto, no Piero.
think:1SG that Nane that they have seen not Piero
'I think they have seen Nane, not Piero.'

b. Me domando {* che} chi { che} Nane ga visto al marcà.
me ask:1SG that who that Nane has seen at.the market
'I wonder who Nane saw at the market.'

However, this line of thinking offers no explanation of the fact that questions, as opposed to MECs (and relative clauses), *do* allow for extraction and sluicing.

(67) *Italian*

a. Rizzi (1990:73)
[Che problema]$_1$ credi che potremo risolvere t$_1$?
which problem think:2SG that could:1PL solve:INF
'Which problem do you think that we could solve?'

b. Ivano Caponigro (p.c.)
Volevo andare al cinema con qualcuno ma non
wanted:1SG go:INF to.the cinema with somebody but NEG
sapevo con chi.
knew:1SG with whom
'I wanted to go to the movies with somebody but I didn't know with who.'

Other arguments in this question-relative controversy are not particularly telling. The (un)availability of multiple wh-words cannot be used as a diagnostics, simply because Italian lacks multiple wh-questions in the first place. Similarly, cooccurrence and ordering restrictions holding between wh-words and topicalized/focalized elements used in §5.3.2 also do not shed any light on the issue. The reason is that focus fronting is impossible not only in (embedded) questions (cf. Rizzi 1997), but also in free relatives, (68a), and not surprisingly also in MECs, (68b).

(68) *Italian* (Ivano Caponigro, p.c.)
a. ?*Ti presento chi A CHOMSKY ho presentato
you:CL present:1SG who to Chomsky have:1SG presented
'I'll introduce you to the person I introduced to Chomsky.'
b. **Ho di che a CHOMSKY parlare, non a TE
have:1SG of what to Chomsky talk:INF not to you
'I have things to discuss with Chomsky, not with you.'

Another contrast that one could expect to hold between questions and MECs if the latter pattern with relatives is that wh-words in the former but not in the latter could be preceded by a topicalized expression. However, even though wh-words in MECs cannot be preceded by topics, as expected, (69a), wh-words in questions cannot do so either, (69b), a fact which seems to correlate with the observation in (66).[20]

(69) *Italian* (Ivano Caponigro, p.c.)
a. **Ho, a Gianni, cosa regalare per Natale
have:1SG to Gianni what donate:INF for Christmas
'I have something to give Gianni for Christmas.'
b. ??So, a Gianni, cosa regalare per Natale
know:1SG to Gianni what donate:INF for Christmas
'I know what to give Gianni for Christmas.'

In sum, though the evidence is somewhat inconclusive, the locality and sluicing facts suggest that wh-movement in Italian MECs is not syntactically identical to the one in questions. On the other hand, there is nothing that appears to prevent associating it with relative-operator movement. The relative-like

[20] Even though there is a contrast in acceptability, Ivano Caponigro considers both examples rather bad and advises not to draw any significance from the contrast.

analysis also receives some cross-linguistic support, in the form of Hungarian a-wh-MECs and MECs that are complements to some dynamic predicates.

5.3.4 Conclusion

When it comes to wh-movement, MECs behave as syntactic chameleons. They utilize whatever wh-movement strategy is made available in a particular language. In §5.3.1, we saw that the wh-movement can be a "short" one, one that corresponds to short scrambling of indefinite pronouns—indef-movement, or the movement of lower wh-words in multiple interrogatives. On the other extreme are Hungarian a-wh-MECs, discussed in §5.3.2, MECs that have the morphosyntactic appearance of free relative clauses. Somewhere in the middle is the most common strategy—the interrogative-like strategy, on which the landing site for interrogative wh-movement is used. These findings seem to corroborate my overarching hypotheses, in particular that MECs are selected by a lexical rather than functional predicate and that wh-movement itself is free of any syntactic feature or criterial licensing. The task for future research is to determine why the interrogative strategy is cross-linguistically clearly the default one (with the notable exception of Italian) and why the Hungarian relative-like pattern is not more readily replicated in other languages.

5.4 Raising and control

In this section, I provide more arguments supporting the syntactic flexibility position. Taking the perspective from control and raising, I will show that various types of MECs are attested: raising MECs, obligatory control MECs, as well as non-obligatory control MECs. The choice in a particular language is partly predictable from the range of syntactic structures available for MECs in that language. This range is in turn primarily determined by the applicable wh-movement strategies, discussed in the preceding section. Thus, we can see a clear correlation between vP-level/restructuring MECs and raising MECs on the one hand, and FinP-level MECs and control MECs on the other. This matches the classical generalization that control constituents are bigger than raising constituents (see e.g. Chomsky and Lasnik 1993; Landau 2000; Wurmbrand 2001; Dotlačil 2004).

Four basic MEC patterns, schematized in (70), will be observed. In (70a), the MEC is of arbitrary category (vP or FinP) and is selected by an impersonal version of the MEC-selecting predicate BE. Its impersonality is structurally reflected by the absence of personal functional layers, in particular AgrSP. In such cases, the MEC contains a PRO with arbitrary reference. In (70b), the MEC is a vP selected by a personal version of the MEC-embedder BE. The functional structure (AgrSP) establishes a relation with the vP internal subject—leading to the valuation of case and phi features. The structure in (70c) represents the obligatory control case, where the MEC is a FinP and hosts

an obligatorily controlled PRO. This PRO is controlled by the closest available matrix argument, in particular the participant argument of the subpredicate AT. In the last case, (70d), the MEC is finite and hosts its own referential subject, which is either a *pro,* which can but need not be bound by a matrix argument, or it is a full lexical subject.

(70) a. **Impersonal MEC**
[$_{\text{BeP}}$ BE [$_{\text{MEC}}$ ... PRO$_{arb}$ ...]]
b. **Raising MEC**
[$_{\text{AgrSP}}$ AgrS$_i$ [$_{\text{BeP}}$ BE [$_{\text{MEC/vP}}$ wh [$_{\text{vP}}$ ... subject$_i$ ...]]]]
c. **Obligatory control MEC**
[$_{\text{AtP}}$ subject$_i$ AT [$_{\text{BeP}}$ BE [$_{\text{MEC/FinP}}$ wh [$_{\text{FinP}}$ ... PRO$_i$ ...]]]]
d. **Finite MEC**
[$_{\text{AtP}}$ subject$_i$ AT [$_{\text{BeP}}$ BE [$_{\text{MEC/FinP}}$ wh [$_{\text{FinP}}$ ... subject$_j$/*pro*$_{i/j}$ ...]]]]

In §5.4.4, I will show that this basic range of options is not enough to account for the behavior of Russian. I will argue that Russian MECs are special in that their control-like predicate is not (a part of) the matrix predicate, but rather an MEC-internal applicative head.

My assumptions about the syntax of control are minimal.[21] I will assume that arbitrarily interpreted PRO is simply a covert free variable, which is in need of no syntactic licensing. Obligatorily controlled PRO, on the other hand, will be treated as an operator that binds the closest participant argument variable and that this operator needs certain functional structure to be licensed, in particular a defective T/AgrS head, i.e. a head that normally does not license nominative—the structural case of overt subjects (but see §5.4.2). The semantic account of control will be developed in §6.4, where I will defend the property/predicate analysis of control, based on MEC-specific evidence, over the proposition analysis (see Landau 2000 for discussion of the property vs. proposition controversy).

The rest of this section is organized as follows. In §5.4.1, I will investigate the properties of Czech restructuring MECs, coming to the conclusion that they are to be analyzed as raising MECs. In §5.4.2, I turn to another class of Czech MECs, namely non-restructuring (subjunctive and infinitival) MECs and show that they are control structures. The cooccurrence of both raising and control MECs within one language correlates with two possible landing sites for wh-movement (vP and FinP). I further show that non-restructuring infinitival MECs in other languages must also be analyzed as obligatory control structures. On the other hand, languages that lack the infinitive have subjunctive MECs which are neither raising nor control. Instead, they contain ordinary nominative-marked subjects (or a *pro*). This is shown in §5.4.3. The last section, §5.4.4, concentrates on a special obligatory control situation in Russian.

[21] For a recent technically full-fledged minimalist account of control, see especially Landau (2000) and his subsequent work.

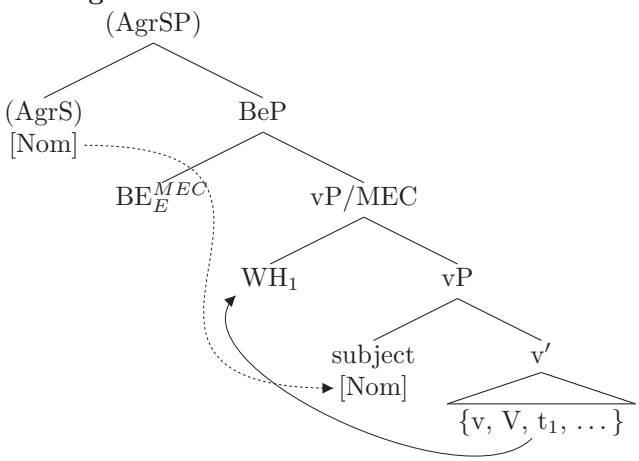
§5.4.5 summarizes the findings.

5.4.1 Raising: Czech restructuring MECs

A number of scholars have suggested that MECs are raising structures, in particular Babby (2000) and Livitz (2010) for Russian, Lipták (2003) for Hungarian, and Ceplová (2007) for Czech. The argument has most clearly been given for Czech, on which I concentrate in this subsection. Hungarian, Slovenian, and possibly other languages might perhaps be assimilated to the present analysis of Czech.[22] Russian will be discussed in §5.4.4.

The structure I propose for raising MECs is given in (71). The MEC is a vP and it gets selected by BE_{E}^{MEC}, which qualifies as a raising predicate. The subject is generated in the MEC and gets case-licensed by the matrix AgrS. Notice that this structure is obligatorily accompanied by the restructuring phenomenon of clitic climbing, discussed in §5.2. This is because clitics must attach between TP and FinP and since these projections are missing in the MEC, the clitic climbs out of it.[23]

(71) **Raising MEC**



[22]The structure proposed for Hungarian in §5.3.2 suggests that Hungarian MECs should be control structures, since they contain a TP/FinP. The analysis, in particular the presence/absence of TP/FinP, might be subject to reassessment if it were to be found out that Hungarian MECs display raising properties. I leave this issue open here.

[23]I will use the following notational convention: a full line with an arrow denotes movement and a dotted line with an arrow denotes feature-valuation. See the examples below:

(i) features (on) X value features (on) Y
[. . . X ⋯▸ Y . . .]

(i) X moved from the position Y
[. . . X . . . Y . . .]

Before I move on to the argumentation showing that the above structure is really what characterizes (a class of) Czech MECs, I should point out that Czech has two variants of the MEC-embedding predicate BE_E^{MEC}: *mít* 'have' and *být* 'be'. The former one is a truly raising predicate in that it can be associated with AgrSP and therefore can check the case-features of the embedded subject. The latter one is inherently impersonal, i.e. it lacks the AgrSP, and therefore cannot license overt (nominative) subjects.[24]

(72) a. AgrS+BE ↔ *mít* 'have'
b. BE ↔ *být* 'be'

The discussion below will mostly concentrate on the raising predicate. The impersonal predicate will become significant in the discussion of Russian MECs (see §5.4.4).

Arguments for raising

Argument 1: Weather predicates One of the best ways to distinguish between raising and control predicates is to check whether the apparent subject of the matrix predicate can be non-referential. This is possible with raising predicates, but completely impossible with control predicates, which require referential subjects. The standard way to test this is to use so-called weather predicates, such as 'rain', or other predicates that have expletive (non-referential) nominative subjects, such as the Czech *stýskat se* 'miss (somebody)'. The two examples below show clearly that Czech MECs can contain such predicates, suggesting strongly that the MEC-embedder *nemělo* 'NEG:had' is a raising predicate.

(73) *Czech*
a. Jaktože je mokro? Tady přece nemělo kdy pršet.
how.come is wet here DISC.PART NEG:had:3SG when rain:INF
'How come it's wet? There's no time when it could have rained here.'
b. Nemělo se mu po kom stýskat.
NEG:had:3SG CL.REFL him:CL.DAT after who miss:INF
'There was nobody who he could be missing.'

Argument 2: Thematic restrictions The raising nature of *mít* 'have' is further corroborated by the fact that it imposes no semantic restrictions on the subject. In effect, the subject can also be inanimate, as shown in the following example.

[24] In §5.4.2, I will show that *mít* 'have' can also spell out AgrS+AT+BE, i.e. the control version of the MEC-embedding predicate.

(74) *Czech*
Ten hrnek se neměl kdy rozbít.
that cup CL.REFL NEG:had when break:INF
'There was no time for the cup to break.'

Argument 3: Wh-subjects Czech allows MEC wh-words to take the role of subjects. Like any other subject of MECs, also the wh-subject is expected to enter into a case/agreement relation with the matrix AgrS. As shown in (75), this is indeed the case, since *kdo* 'who' is the nominative, a form related to finiteness, and the verb *neměl* 'not had' reflects the masculine feature of 'who' (rather than the default neuter, which would signal the lack of agreement).

(75) *Czech*
Neměl je tam kdo přivítat.
NEG:had:MASC them:CL.ACC there who:NOM.MASC welcome:INF
'There was nobody who could welcome them there.'

Moreover, the wh-subject is in complementary distribution with non-wh-subjects.

(76) *Czech*
*Hlavní organizátor je tam neměl
main organizer:MASC them:CL.ACC there NEG:had:MASC
kdo přivítat.
who:NOM.MASC welcome:INF
'The main organizer didn't have anybody who could invite them there.'

Finally, the following example shows that the wh-subject can be inanimate, which suggests that it is thematically constrained only in the embedded clause.

(77) *Czech*
Jak přestalo pršet, už nám nemělo
after stopped rain:INF already us NEG:had:3SG.NEUT
co pokazit večer.
what:NOM.NEUT spoil:INF evening
'After it stopped raining, there was nothing anymore that could spoil our evening.'

Argument 4: Active/passive voice switch According to Postal (1974), there is a systematic difference between raising and control predicates with respect to the preservation of truth conditions under the switch between active and passive voice in the embedded clause. While this switch below a raising predicate preserves the truth conditions, the switch below a control predicate does not.

(78) a. **Raising predicate**
Mary is likely to kiss John. ⇔ John is likely to be kissed by Mary.

b. **Control predicate**
Mary is anxious to kiss John. ⇏ John is anxious to be kissed by Mary.

In (79a), *Marušku* 'Mary:ACC' is the direct object of *ukázat* 'show' and the verb is either the impersonal 'be' (*není* 'is not') or 'have' with an arbitrary reference expressed by third person plural. In either case, there is no thinkable thematic relation between the MEC-embedding predicate and the object of the embedded predicate. In (79b), on the other hand, *Maruška* 'Mary:NOM' is (apparently) the subject of 'have' and could therefore enter into a thematic relation with 'have', if it was a control predicate. This would lead to a "richer" interpretation of (79b). However, the two are truth-conditionally indistinguishable, supporting the claim that 'have' and 'be' are not control verbs.

(79) *Czech*

a. Marušku není / nemají komu ukázat.
Maruška:ACC NEG:be:IMPRS / NEG:have:3PL who:DAT show:INF
'There is nobody to whom one can show Maruška.'
⇔

b. ?Maruška nemá být komu ukázána.
Maruška NEG:has be:INF who:DAT shown:PASS.PART
'There is nobody to whom Maruška can be shown.'

Notice that passivized verbs in MECs are somewhat less acceptable. However, the issue is orthogonal to the my present concern and therefore I leave it open.

Summary

In this subsection, I provided four arguments in favor treating Czech (restructuring) MECs as raising structures. The fact that Czech MECs are not isolated in this behavior is shown by the following Slovenian examples, exhibiting an impersonal predicate *biti žal* 'feel sorry', (80a), and a weather predicate *deževati* 'rain':

(80) *Slovenian* (Marko Hladnik, p.c.)

a. Nima ti česa biti žal.
NEG:have:3SG you:DAT what:GEN be sorry
'There's nothing you can feel sorry about.'

b. Ni imelo kdaj deževati.
NEG had:3SG.NEUT when rain:INF
'There was no time when it could rain.'

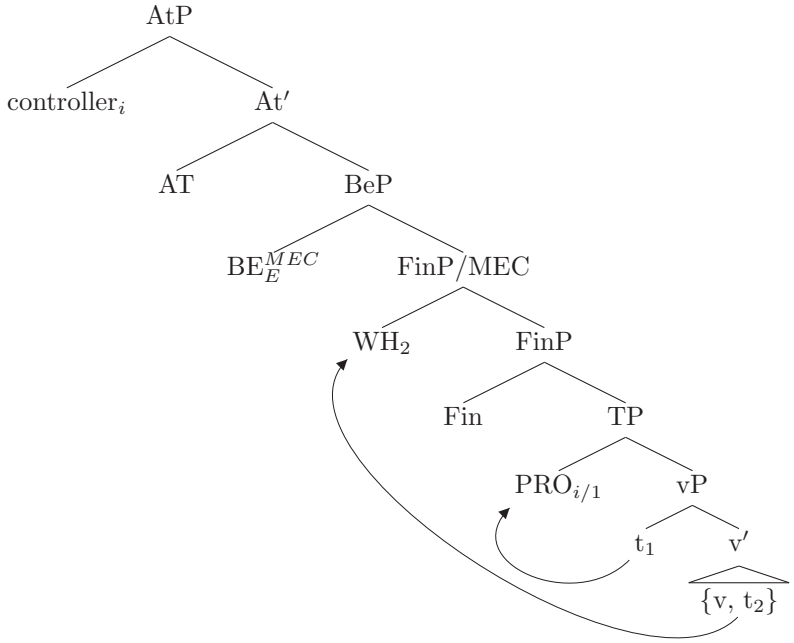
In the next subsection, I show that non-restructuring MECs display control properties.

5.4.2 Control: non-restructuring MECs (in Czech)

That MECs are obligatory control structures was most forcefully argued by Pancheva-Izvorski (2000) for Russian (and partly Bulgarian). I will revisit Pancheva-Izvorski's evidence from Russian in §5.4.4 and argue that Russian needs a special treatment. Bulgarian MECs will be argued in §5.4.3 to contain *pro* rather than PRO. In this subsection, I concentrate mainly on non-restructuring MECs in Czech, but at the end of the subsection, I provide examples from other languages that suggest that the obligatory control pattern is more widely attested.

The structure I propose for obligatory control MECs is given in (81). The MEC is a FinP and it gets selected by BE_E^{MEC}. This predicate itself has no control properties, as we saw above. Instead, the control property of the matrix predicate is introduced by a higher predicate, typically AT, whose participant argument becomes the controller. Notice that in this case, the verb *mít* 'have' corresponds to the possessive AT+BE (or, more precisely AgrS+AT+BE), rather than just to BE. The MEC itself contains an obligatorily controlled PRO, which is licensed by the syntactic Fin head.

(81) **Obligatory control MEC**



The type of MECs that are most clearly characterized by (81) are subjunctive MECs.[25] The subjunctive is a finite mood and finite structures are always

[25]Czech belongs to the class of languages that have the option between the infinitive and subjunctive mood in MECs; see §2.2.3.

opaque for clitic extraction in Czech. Subjunctive MECs are no exception, as witnessed by (82). According to the assumptions introduced in §5.2.4, Fin is the head which is responsible for blocking clitic climbing. I also suggested that the subjunctive morpheme *by* occupies this head.

(82) *Czech*
Karel {* jí} nemá koho by { jí}
Karel her:CL.DAT NEG:has who:ACC SBJ.3 her:CL.DAT
představil.
introduce:PAST.PART
'There's nobody Karel could introduce her to.'

Now, the question is why (82) should involve PRO rather than *pro,* given that the subjunctive is finite and finite verbs normally license nominative-marked elements, such as *pro*. The reason why I take this to be an obligatory control structure is the fact that the empty subject in the MEC is obligatorily referentially dependent on the matrix subject, as shown in (83).[26]

(83) *Czech*
Karel$_i$ neměl koho by { PRO$_i$ /* *pro*$_j$ /* Petr}
Karel NEG:had who:ACC SBJ.3 PRO / *pro* / Petr
pozval na večeři.
invite:PAST.PART for dinner
'Karel$_i$ had nobody who he$_i$ / he$_j$ / Petr could invite for dinner.'

Let us now turn back to infinitival MECs. Though clitic climbing, as in (84a), is a strongly preferred option (and has been used in all previous examples), its absence is certainly acceptable. This is illustrated in (84b), where the clitic *jí* 'her' follows the wh-word and is therefore clearly located within the MEC.

(84) *Czech*
a. Karel jí nemá koho představit.
Karel her:CL.DAT NEG:has who:ACC introduce:INF
b. Karel nemá koho jí představit.
Karel NEG:has who:ACC her:CL.DAT introduce:INF
'There's nobody Karel could introduce her to.'

Since the structural description of (84b) is not self-evident, I will provide some argumentation in order to firmly establish that this type of MECs is really to be analyzed as a FinP containing a PRO. On the face of it, there are three plausible structural descriptions for infinitival MECs without clitic climbing. They are given in (85) and differ in background assumptions concerning A-movement,

[26] Control into finite structures is common in Balkan languages which have no infinitive (see Landau 2004 and the references cited therein). What is surprising is that control into finite MECs is observed for Czech and Hungarian, both of which do not have finite control otherwise, while there is no control into Balkan MECs, as will be discussed in §5.4.3.

clitic movement, and licit functional sequences.

(85) a. [$_{\text{AtP}}$ Karel$_i$ AT [$_{\text{BeP}}$ BE [$_{\text{MEC/FinP}}$ who [$_{\text{FinP}}$ −Fin [$_{\text{TP}}$ *clitics* PRO$_i$ to invite]]]]]
b. [$_{\text{AgrSP}}$ Karel$_1$ [$_{\text{BeP}}$ [$_{\text{MEC/vP}}$ who *clitics* t$_1$ to invite]]]
c. [$_{\text{AtP}}$ Karel$_1$ AT [$_{\text{BeP}}$ BE [$_{\text{MEC/FinP}}$ who *clitics* [$_{\text{vP}}$ t$_1$ to invite]]]]

Under the first analysis, (85a), the MEC is structurally identified with subjunctive MECs, with the only difference that the infinitival MEC contains a covert −Fin head. The PRO gets obligatorily controlled by the matrix argument *Karel*. This analysis is related to the idea (e.g., Wurmbrand 2001) that the presence of higher functional projections entail the presence of lower functional projections, in this case the presence of FinP entails the presence of a defective TP, which syntactically licenses PRO.[27] It also relies on the independently needed assumption that wh-movement can target at least two positions in Czech infinitival MECs—FinP and vP. The analysis in (85b) is very close to the raising analysis of restructuring MECs devised in the preceding subsection. It unifies wh-movement in the two but relies on the non-uniformity of clitic movement, which must be able to target at least two positions: the edge of TP and the edge of vP. Notice that this assumption entails a relaxation of the highly constrained analysis of clitic movement presented in §5.2.4, under which clitics *always* move to the edge of TP. Finally, the structure in (85c) combines the elements of the two preceding ones. The matrix verb is a raising predicate as in the latter but the wh-movement and clitic movement target the FinP, as in the former. The analysis relies on the assumption that lower functional projections (TP in this case) can be missing even if higher projections (CP in this case) are present (e.g., Dotlačil 2004). This leads to absence of clitic climbing (blocked by FinP), but long distance agreement/A-movement to the closest AgrS/T, which is in the matrix.

The underlying assumptions made by the analyses above make different predictions with regard to the interaction between clitic climbing (CC) and long-distance agreement (LDA). There are four logical possibilities of combining these two restructuring phenomena:

(86) a. [+LDA] [+CC]
b. [−LDA] [−CC]
c. [−LDA] [+CC]
d. [+LDA] [−CC]

Assume that LDA that can take place only if the embedded T/AgrS is missing, i.e. in a situation where the embedded nominative subject must look for its licenser in the matrix clause. The assumptions underlying the analyses in (85b) and (85c) prohibit no combination of CC and LDA. On the other hand, the

[27] Informally speaking, projections can only be removed from the top of the tree, an influential idea which goes back to Evers (1975) and which has been called the *tree-pruning hypothesis*.

assumption that the presence of a CP entails the presence of a TP/AgrSP, underlying the analysis in (85a), rules out (86d).

The set of examples in (87) puts these predictions to a test.[28] Concentrate on the bold-faced phenomena. The clitic *jim* 'them', which originates as the object of *dávat* 'give', either climbs, (87a)/(87c), or remains in the embedded clause, (87b)/(87d); the agreement relation between the matrix verb *doporučoval-* 'recommend' and the embedded object *lehk- strav-* 'light food' is either realized ('recommend' reflects the feminine gender and 'light food' is in nominative), (87a)/(87d), or is not ('recommend' is in the default neuter gender and 'light food' is in accusative), (87b)/(87c). It turns out that the pattern in (86d), exemplified in (87d), is indeed ruled out, i.e. long-distance agreement depends on clitic climbing, as predicted by (85a) but not by (85b) and (85c).

(87) *Czech*

a. [+LDA] [+CC]
Před operací se **jim** doporučoval**a** dávat
before operation REFL them:CL.DAT recommended:FEM give:INF
lehk**á** strav**a**.
light:NOM.FEM food:NOM.FEM

b. [−LDA] [−CC]
Před operací se doporučoval**o** dávat **jim**
before operation REFL recommended:NEUT give:INF them:CL
lehk**ou** strav**u**.
light:ACC.FEM food:ACC.FEM

c. [−LDA] [+CC]
Před operací se **jim** doporučoval**o** dávat
before operation REFL them:CL recommended:NEUT give:INF
lehk**ou** strav**u**.
light:ACC.FEM food:ACC.FEM

d. [+LDA] [−CC]
*Před operací se doporučoval**a** dávat **jim**
before operation REFL recommended:FEM give:INF them:CL
lehk**á** strav**a**.
light:NOM.FEM food:NOM.FEM
'It was recommended to give them [say, to the patients] light food before the operation.'

In sum, general considerations about the nature of functional sequence and clitic movement, embodied in the test in (87), lead us to the conclusion that infinitival MECs without clitic climbing (nonrestructuring infinitival MECs) should be analyzed as in (85a). The alternative in (85c) violates the assumption

[28] For independent reasons, I cannot test the predictions directly on MECs. This is because the matrix verbs either always (long-distance) agree ('have') or never do so ('be'). In (87) I use an infinitival complement of the verb 'recommend', which gives rise to a comparable structural ambiguity.

that the presence of CP-projections entails the presence of a TP and (85b) is based on the problematic idea that clitic movement has flexible (or at least multiple possible) targets. This conclusion is welcome from the perspective of the general theory, as it forces us to adopt a set of more restrictive assumptions. At the same time, it strengthens the overarching hypothesis that MECs are not syntactically deterministic.

I conclude that both subjunctive MECs and nonrestructuring infinitival MECs are of the format in (81), repeated below in a bracketed form.

(88) $[_{\text{AtP}}$ subject$_i$ AT $[_{\text{BeP}}$ BE $[_{\text{MEC/FinP}}$ wh $[_{\text{FinP}}$ ±Fin $[_{\text{TP}}$ *clitics* PRO$_i$ to invite]]]]]

The rest of this subsection is devoted to providing arguments for (88).

Arguments

Once again, I will go through the raising/control diagnostics. This time, the goal is to support the control side. The crucial examples are those of (a) subjunctive and (b) nonrestructuring infinitival MECs. For comparison, examples in (c) are canonical (restructuring) MECs.

Argument 1: Impersonal predicates Under the present analysis, the MEC-selecting predicate *mít* 'have' is a control verb, whose external argument obligatorily controls the MEC-internal PRO. Since this argument must be referential, it follows that there should be a ban on impersonal and weather predicates within the MEC, as they only support non-referential subjects. This expectation is borne out, as illustrated below. Notice that (89b) qualifies as a nonrestructuring infinitival MEC (and therefore a FinP) by not letting the clitics *se* and *mu* climb.

(89) *Czech*

a. *Včera nemělo po kom by se mu
yesterday NEG:had after who SBJ.3 CL.REFL him:CL.DAT
stýskalo.
miss

b. *Včera nemělo po kom se mu stýskat.
yesterday NEG:had after who CL.REFL him:CL.DAT miss:INF

c. Včera se mu nemělo po kom stýskat.
yesterday REFL him:CL.DAT NEG:had after who miss:INF
'Yesterday, there was nobody who he could be missing.'

Argument 2: Thematic restrictions The control version of 'have' might differ from its raising kin in imposing an animateness restriction on its subject. This is indeed the case, as illustrated below. (90a) and (90b) do not tolerate the inanimate subject *ten hrnek* 'that cup', as opposed to the restructuring/raising structure in (90c).

(90) *Czech*

a. #Včera ten hrnek neměl kdy by se
yesterday that cup NEG:had when SBJ.3 CL.REFL
rozbil.
break:PAST.PART

b. #Včera ten hrnek neměl kdy se rozbít.
yesterday that cup NEG:had when CL.REFL break:INF

c. Včera se ten hrnek neměl kdy rozbít.
yesterday REFL that cup NEG:had when break:INF
'Yesterday, there was no time for the cup to break.'

Argument 3: Overt embedded subject In raising MECs, the lexical subject is generated within the MEC. If it does not move in the course of the derivation, it is spelled out there as well (see (91c)). In subjunctive and nonrestructuring infinitival MECs, on the other hand, the lexical subject is generated in the matrix clause and there is no way for it to get into the MEC. We therefore expect there to be a ban on overt subjects within the MECs.

(91) *Czech*

a. *Včera neměl s kým by si Karel promluvil.
yesterday NEG:had with who SBJ.3 REFL Karel speak:PAST.PART

b. *Včera neměl s kým si Karel promluvit.
yesterday NEG:had with who REFL Karel speak:INF

c. Včera si neměl s kým Karel promluvit.
yesterday REFL NEG:had with who Karel speak:INF
'Yesterday, Karel had nobody to speak with.'

Argument 4: Wh-subject Wh-subjects are predicted to be ruled out. The reason is that, as in the previous argument, wh-subjects must be generated within the MEC, a position reserved exclusively for a PRO. Interestingly, even though the CP structures are less acceptable than their canonical vP counterpart, they are not completely ungrammatical.

(92) *Czech*

a. ?Včera neměl kdo by je tam
yesterday NEG:had who:NOM SBJ them:CL.ACC there
přivítal.
welcome:PAST.PART

b. ?Včera neměl kdo je tam přivítat.
yesterday NEG:had who:NOM them:CL.ACC there welcome:INF

c. Včera je tam neměl kdo přivítat.
yesterday them:CL.ACC there who:NOM welcome:INF
'There was nobody who could welcome them there yesterday.'

The relative acceptability of (92a) and (92b) is unexpected. In effect, the wh-subject is the only type of subject capable of replacing a PRO. That this "replacement" is real is further supported by the observation that the reference of the subject of the matrix (*Trautenberg*) and the embedded wh-subject (*kdo*) can be disjoint:[29]

(93) *Czech*
Trautenberg neměl kdo by mu uklidil.
Trautenberg NEG:had who:NOM SBJ.3 him:CL.DAT clean.up
'Trautenberg had nobody who could clean up in his house.'

It is quite intriguing that Czech is not alone in this quirky situation. As it turns out, Hungarian exactly replicates the Czech pattern. Hungarian generally does not tolerate referentially disjoint subjects, independently of the embedded mood. This is demonstrated by the ungrammaticality of the first person infinitival form *küldenem* in (94a) and by the ungrammaticality of the overt subject *Anna* in (94b).

(94) *Hungarian* (Lipták 2003:2/3)
a. Péternek van kit { küldeni /* küldenem} a
Peter:DAT be who:ACC send:INF.3SG / send:INF.1SG the
postára.
post.office.to
'Peter has somebody who he/I can send to the post office.'
b. Péter van (* Anna) kit küldjön a postára.
Peter is Ann who:ACC send:SBJ.3SG the post.office.to
'Peter has somebody who he/Anna can send to the post office.'

However, when it comes wh-subjects, the result is acceptable:

(95) *Hungarian* (Anikó Lipták, p.c.)
Nekem van ki elmenjen a postára.
I:DAT be:IMPRS who:NOM go:SBJ.3SG the post.office.to
'I have somebody who can go to the post office.'

These observations are most likely related to the pattern observed in §2.2.3 for Spanish, Portuguese, and some other languages. These languages make mandatory use of the infinitive in MECs and embedded subjects are obligatorily controled; see (96a). The only situation when both these maxims can be violated is one with a wh-subject:

(96) *Portuguese* (Adriana Cardoso, p.c.)
a. Eu não tenho com quem { falar /* fale}.
I NEG have with who talk:INF / talk:SBJ
'I don't have anyone to talk with.'

[29]The example is adapted from a Czech children TV series *Krkonošské pohádky*.

b. Eu não tenho quem {* fazer / faça} isto.
I NEG have who do:INF / do:SBJ this
'I do not have anyone who could do this.'

In sum, wh-subjects in Czech do not behave as expected and are not explained by the present analysis. Nevertheless, it turns out that this "misbehavior" is quite systematically replicated across many other unrelated languages. I will provide a systematic analysis of this phenomenon in §6.4 and will turn the problem into an argument for the property analysis of control. In the next part of this subsection, I will provide some more independent evidence for the vP/CP structural ambiguity.

More evidence

The presence of a FinP, diagnosed by the absence of clitic climbing, has other interesting consequences.

Argument 5: G(ivenness)-movement As a strongly discourse-configurational language, Czech partitions sentences into two areas, a "given area" and a "new area", such that no new elements (marked by F subscripts) c-command given elements (marked by G subscripts).[30] The main predicate often appears on the border of the partition (cf. Kučerová 2007). As is obvious from the examples below, there is some freedom in the ordering of given elements (both (97B) and (97B′) are fine, as are (98B) and (98B′)), as long as no new element precedes (c-commands) a given element, as in the infelicitous (97B″). There is no such freedom in the ordering of new elements: they must appear in their underlying, non-derived order. This is illustrated by the contrast between (98B)/(98B′) on the one hand and (98B″) on the other. The underlying order verb-object must be respected.[31]

(97) *Czech*

A Kdo včera Karlovi telefonoval?
who:NOM yesterday Karel:DAT called
'Who called Karel yesterday?'

B Včera$_G$ Karlovi$_G$ telefonovala$_G$ Marie$_F$. $G \prec F$
yesterday Karel:DAT called Marie:NOM
'Marie called Karel yesterday.'

B′ Karlovi$_G$ včera$_G$ telefonovala$_G$ Marie$_F$. $G \prec F$

B″#Karlovi$_G$ telefonovala$_G$ Marie$_F$ včera$_G$. $F \prec G$

(98) *Czech*

A Co se včera stalo s Karlem?
what REFL yesterday happened with Karel
'What happened with Karel yesterday?'

[30] I tentatively follow the givenness theory of information structure (Schwarzschild 1999; Sauerland 2005; Selkirk and Kratzer 2009).

[31] The verb *ujel* 'left' is unaccusative, which is why the object *vlak* 'train' is in nominative.

B	Včera$_G$ Karlovi$_G$ ujel$_F$ vlak$_F$. yesterday Karel:DAT left train:NOM 'Yesterday Karel missed the train.'	$V_F \prec O_F$
B′	Karlovi$_G$ včera$_G$ ujel$_F$ vlak$_F$.	$V_F \prec O_F$
B″	#Karlovi$_G$ včera$_G$ vlak$_F$ ujel$_F$.	$O_F \prec V_F$

As argued by Kučerová (2007), this partitioning is facilitated by what she calls G-movement, i.e. movement of given elements outside of the scope of new elements. This movement is very local, certainly clause-bound, and can even precede A-movement in the course of the derivation. In this respect, G-movement substantially differs from other information-structure related transformations, such as topicalization or focus fronting.[32]

Let us now turn to the relevance of G-movement to the syntax of MECs. If the position of clitics really marks the clausal boundary, in accord with the present hypothesis, then we expect G-movement to never target any position that precedes clitics. As we see in (99), this prediction is borne out. In (99a), the clitic *ti* 'you' climbs and G-movement of the constituent *ze své zahrady* 'from my garden' can proceed outside of the MEC. In (99b), the clitic does not climb and G-movement targets an embedded position, accordingly. In (99c), the clitic climbs and G-movement remains local. And finally, (99d) shows that G-movement cannot proceed in the absence of clitic climbing.

(99) *Czech*
Byli u mě zloději a všechno z mé zahrady ukradli.
were at me thieves and everything from my garden stole
'There were thieves at my house and they stole everything from my garden.'

a. Teď už **ti** ze své zahrady$_G$ nemám
now already you:DAT from my:REFL garden NEG:have:1SG
co nabídnout$_F$.
what offer:INF

b. Teď už nemám co **ti** ze své
now already NEG:have:1SG what you:DAT from my:REFL
zahrady$_G$ nabídnout$_F$.
garden offer:INF

c. ?Teď už **ti** nemám co ze své
now already you:DAT NEG:have:1SG what from my:REFL
zahrady$_G$ nabídnout$_F$.
garden offer:INF

[32] G-movement has no syntactically defined landing site, it is motivated by interface requirements, in particular by the principle called Maximize Presupposition (Heim 1991). For details of the proposal, see Kučerová (2007, 2008).

d. *Teď už ze své zahrady$_G$ nemám co
now already from my:REFL garden NEG:have:1SG what
ti nabídnout$_F$.
you:DAT offer:INF
'Now there 's nothing anymore that I can offer you from my garden.'

A full understanding of what governs G-movement of given constituents within/out of MECs would require a detailed investigation of MECs' information structure properties. I leave this for another occasion. For now, let me just remark that MECs generally prefer to be as "small" as possible, so that any movement that *can* target a position outside the MEC generally does so. The reason for this might be that the existential quantification expressed by the MEC is often itself the focus of the utterance. If this is the case, any given constituent is predicted to move out of its scope.

Summary

I reconsidered Czech MECs and showed that they are not structurally uniform. Next to the most common raising (restructuring) MECs discussed in §5.4.1, there are two more types of non-restructuring MECs: subjunctive MECs and infinitival MECs that are opaque for clitic climbing and other types of non-contrastive extractions such as G-movement, called simply non-restructuring infinitival MECs. I argued that these are FinPs rather than vPs. In line with a restricted theory of functional sequence where the presence of a higher projection entails the presence of a lower projection, the TP structural layer is also present (FinP → TP). The presence of a TP has two related consequences. Firstly, the MEC-subject must be licensed within the embedded clause, which precludes a raising analysis of non-restructuring MECs. Secondly, the embedded subject must be a PRO, as the embedded T is "defective" and cannot license the case of a full lexical DP (or a *pro*). This consequence is somewhat unexpected for subjunctive MECs, as subjunctives behave in all respects as finite in other contexts. This problem has been left open (see footnote 26). Another issue is the one of wh-subjects. I observed that wh-subjects can exceptionally sidestep the use of a PRO and form thus the only type of lexical subject that can be licensed within a non-restructuring MEC. Though somewhat mysterious, this observation is not isolated, as the exact same pattern appears in Hungarian and parallel exceptional behavior of wh-subjects in MECs is observed for many other languages. See §6.4 for more discussion.

Before I turn to the discussion of finite MECs, I would like to provide some evidence that non-restructuring MECs in other languages behave in a way analogous to Czech.

Non-restructuring MECs in other languages

In §5.3, and in particular in §5.3.1, I observed that languages divide into two categories based on the (un)availability of short wh-movement. If a language

does not allow for short wh-movement, it is bound to move its wh-words to the left-periphery, in particular to the edge of FinP. MECs in these languages are then expected to be of the control rather than the raising type. That this is indeed the case, is witnessed by the ungrammaticality of weather predicates in MECs.

(100) *Spanish* (Cintia Widmann, p.c.)
¿ Por que esta mojado? * No hubo cuando llover.
for what is wet NEG had when rain:INF
'Why is it wet? There was no time when it could rain.'

Now, the question is, do MECs in these languages exhibit obligatory or non-obligatory control? The following evidence suggests that the former is the case. Notice that the disjoint reading (ii) is systematically unavailable.

(101) a. *Italian* (Ivano Caponigro, p.c.)
Hai con che scrivere una lettera?
have:2SG with what write:INF a letter
(i) 'Do you have anything you can write a letter with?'
(ii) *'Do you have anything I/one can write a letter with?'

b. *Spanish* (Luis Vicente, p.c.)
¿ Tienes con qué escribir?
have:2SG with what write:INF
(i) 'Do you have anything with which you can write?'
(ii) ??'Do you have anything with which I/one could write?'

c. *Portuguese* (Adriana Cardoso, p.c.)
Tens com o que escrever?
have:2SG with the what write:INF
(i) 'Do you have anything with which you can write?'
(ii) *'Do you have anything with which I/one could write?'

Specifically, the type of obligatory control that MECs exhibit is exhaustive control (cf. Landau 2000). This is clear from the following example: the PRO must be singular (exhaustively controlled by its antecedent) and hence cannot serve as the subject of a predicate that requires semantically plural subjects:

(102) *Portuguese* (Adriana Cardoso, p.c.)
*O João ainda não tem onde se reunir.
the J. still NEG has where CL.REFL gather:INF
'Joao still doesn't have any place where to gather.' [e.g. an organizer of a demonstration]

It is also noticeable that truth-conditionally comparable headed relatives (or at least what appear to be headed relatives, cf. §6.5) do not exhibit obligatory control, which is obvious from the availability of the readings in (b). This contrast between MECs and headed relatives further supports the claim that

there is an important structural difference between the two.[33]

(103) a. *Italian* (Ivano Caponigro, p.c.)
Hai qualcosa / nulla con cui scrivere una
have:2SG something / anything with what:REL write:INF a
lettera?
letter
(i) 'Do you have anything you can write a letter with?'
(ii) 'Do you have anything one can write a letter with?'

b. *Spanish* (Luis Vicente, p.c.)
¿ Tienes algo con (lo) que escribir?
have:2SG something with (the) what write:INF
(i) 'Do you have anything with which you can write?'
(ii) 'Do you have anything with which I could write?'

c. *Portuguese* (Adriana Cardoso, p.c.)
Tens alguma coisa com que escrever?
have:2SG some thing with that write:INF
(i) 'Do you have anything with which you can write?'
(ii) 'Do you have anything with which I could write?'

In summary, even in languages that have no restructuring MECs, MECs are obligatory control structures.

5.4.3 Finite MECs: Balkan languages

There is a class of languages, roughly corresponding to the Balkan sprachbund, that lack the infinitive mood and which therefore rely on the subjunctive in their MECs.[34] Subjunctive is a finite mood, in principle capable of licensing overt subjects. Yet, as we saw in the preceding subsection, even subjects of subjunctive MECs can be obligatorily controlled. This holds for Czech and Hungarian, languages which also have infinitival MECs. Somewhat surprisingly, languages with no infinitives behave differently in that the MEC subject is referentially independent. The examples below illustrate this observation:

(104) *Bulgarian*

a. Pancheva-Izvorski (2000:26)
Ima te s kakvo da ti pomognat.
have:3SG they:NOM with what SBJ you:DAT help:3PL
'There is something they can help you with.'

[33]The contrast essentially boils down to the traditional distinction between complementation and adjunction (see e.g. Koster 1984, 1987:Ch5, or later Landau 2000, for its relevance for obligatory/optional control), since MECs are complements to the control predicate, while the relative clause is related to the control predicate only indirectly, via adjunction to a nominal head.

[34]The exception is Romanian, which also has infinitival MECs; see §2.2.3.

b. Kostadin Cholakov (p.c.)
Namerih s kakvo da izčistiš poda.
found:1SG with what SBJ clean:2SG floor
'I found something with which you can clean the floor.'

(105) *Greek* (Ourania Sinopoulou, p.c.)
Den exo ti na foresi i Vassiliki sti jiorti tis.
NEG have:1SG what SBJ wear:3SG the Vasiliki at.the name.day her:GEN
'I don't have anything that Vasiliki could wear on her name-day.'

One could wonder whether we witness a meaningful correlation: languages with both infinitival and subjunctive MECs (Czech, Hungarian) exhibit obligatory control into subjunctives and languages that only have subjunctive MECs exhibit no obligatory control in MECs (Bulgarian, Greek). Serbo-Croatian facts suggest that the answer is negative. It falls in the same category as Czech and Hungarian but still allows the subject to have a disjoint reference.

(106) *Serbo-Croatian* (Jelena Prokić, p.c.)
Imam čime da očistiš ruke.
have:1SG what:INST SBJ clean:2SG hands
'I have something with which you can clean your hands.'

Yet, as pointed out in §2.2.3, the optionality between the infinitive and the subjunctive might only be apparent due to the particular dialectal division. Infinitival MECs are associated with Croatian and subjunctive MECs with Serbian. If this dialectal difference is robust, one could expect Croatian to pattern with Czech or Spanish and Serbian with Greek or Bulgarian. My informant on this issue (Jelena Prokić) is Serbian and her judgement of (106) conforms to this hypothesis. Unfortunately, I have not been able to consult any Croatian speaker so far.

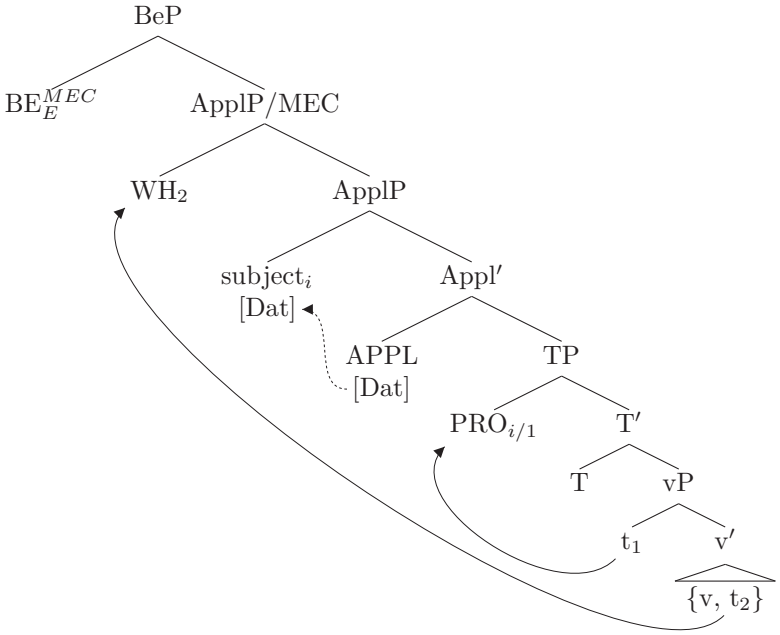
I conclude that in Balkan languages, in particular Bulgarian, Greek, and Serbian (possibly as opposed to Croatian), MECs are neither raising nor control structures. If empty, the embedded subject must be analyzed as a *pro* rather than PRO.

5.4.4 MEC-internal control: the case of Russian

A number of scholars have made claims about the raising/control nature of Russian MECs. Babby (2000) and Livitz (2010) assumed that MECs are raising structures, while Pancheva-Izvorski (2000) and Fleischer (2006) argued for a control analysis. In this subsection, I will go through the whole argumentation carefully and conclude that there is a good reason for this dilemma: Russian MECs exhibit properties of both control and raising. Their lexical subject is generated within the MEC (as in raising), but it is a subject of a control

predicate—an applicative head which obligatorily controls a PRO in its complement. This applicative head roughly corresponds to the English preposition *for* that appears in English possibility/purpose clauses (*The book is available* ***for*** *Dave to read*). In §6.4 I will hypothesize that this Russian-style structural analysis should actually apply more generally—to all obligatory control MECs. The analysis is sketched in (107). Notice that the applicative head is also responsible for dative-assignment (in Russian).[35]

(107) **MEC-internal control**



I will first follow the argumentation path of Pancheva-Izvorski (2000), who provided a set of arguments in favor of the control analysis, i.e. the type of analysis devised in §5.4.2 for Czech and a number of other languages. After I show that her arguments are inconclusive, I turn to a number of additional arguments which bring the hypothesized ambivalence to surface.

[35] A more detailed analysis of this applicative head must be left aside here. However, preliminary considerations suggest that it is related to low applicatives (cf. Pylkkänen 2002) rather than to high or "super-high" applicatives, as the structural position would suggest. The reason is that while low applicatives typically only impose animateness restrictions, (super-)high applicatives exhibit evaluative properties and/or speaker-orientedness (cf. Arsenijević to appear; Tsai 2010) which do not characterize the APPL assumed here.

Pancheva-Izvorski's arguments

Argument 1: Lack of agreement There is no ϕ-feature agreement between the subject and the marix verb, which would be expected if the subject raised from the MEC to the matrix clause.

(108) *Russian* (Pancheva-Izvorski 2000:64)
Mne est' čto čitat'.
me:DAT be:IMPRS what read:INF
'I have something to read.'

This argument is relatively weak. The fact that the Russian matrix verb *est'* 'be' does not display agreement is a lexical idiosyncracy, rather than an effect of a missing structural relation between the subject *mne* 'me' and the matrix T: *est'* 'be' is impersonal and hence cannot agree by definition. Also, a number of scholars (e.g. Lavine and Freidin 2002; Bailyn 2004) have argued that in Russian, the EPP on T can be satisfied even in the absence of agreement, such as in so-called adversity impersonal constructions:

(109) *Russian* (Bailyn 2004:11)
$[_{TP}$ Lodku$_1$ $[_{T'}$ oprokinulo$_2$+T $[_{vP}$ volnoj $[_{VP}$ t$_2$ t$_1$]]]].
boat:ACC turn.over:IMPRS wave:INSTR
'The boat was turned over by a wave.'

If these authors are right in claiming that raising (or A-movement in general) is independent of feature-checking, then Pancheva-Izvorski's argument has lost its force.

Argument 2: No impersonal predicates MECs in Russian do not support "weather predicates" such as *poxolodat'* 'become cold' in (110) or *dožd' idet* 'rain' in (111a) and impersonal predicates such as *xotet'sja* 'feel like/want' in (111b).

(110) *Russian* (Aysa Arylova, p.c.)
*Zdes' bylo nekogda poxolodat'.
here was:IMPRS NEG:when become.cold
'There was no time for it to become cold here.'

(111) *Russian* (Pancheva-Izvorski 2000:65)
a. *Est' kogda idti dožd' / doždju.
be:IMPRS when go:INF rain:NOM / rain:DAT
'There is a time such that it can rain then.'
b. *Est' čto xotet'sja čtoby Ivan pročital.
be:IMPRS what want:INF.REFL that:SBJ Ivan read
'There is something that it would be nice for Ivan to read.'

According to Pancheva-Izvorski, this is because the embedded subject of MECs must be controlled and therefore must be a contentful PRO rather than just an expletive, as required by weather predicates and impersonals of the above type.

At first sight, this looks like a killer-argument against raising. However, there is an alternative explanation, which relies on an independent fact, namely that the matrix predicate is impersonal. Suppose that Russian has only nominative expletives. If this is the case, no Russian expletive can be licensed in a specifier of a T with which it cannot agree and which in turn cannot check the expletive's nominative case. The initial support for this view comes from modal verbs. Some modals in Russian assign nominative to the external arguments, with which they agree, such as *dolžno* 'must/have to' in (112a), others assign dative and are impersonal, such as *nado* 'have to' in (112b).

(112) *Russian* (Aysa Arylova, p.c.)
a. Maša dolžna vyigrat'.
Maša:NOM must:FEM win:INF
'Maša must/has to win.'
b. Maše nado vyigrat'.
Maša:DAT must:IMPRS win:INF
'Maša has to win.'

It turns out that only nominative-assigners are also raising predicates:

(113) *Russian* (Aysa Arylova, p.c.)
a. Zavtra dolžno poxolodat'.
tomorrow must:NEUT become.cold
'Tomorrow it [the weather] must/has to become cold.'
b. *Zavtra nado poxolodat'.
tomorrow must:IMPRS become.cold
'Tomorrow it [the weather] has to become cold.'

The contrast in (113) is readily explained if Russian only has nominative expletives. The type of explanation which posits that *dolžno* 'must/have to' is raising and *nado* 'have to' is control is stipulative: there is no principled reason why it should be so, since in other, related languages, such as Czech, a modal with an analogous (circumstantial/deontic) interpretation is raising:

(114) *Czech*
Zítra se musí ochladit.
tomorrow REFL must:3SG become.cold
'Tomorrow it has to/must become cold.'

More evidence in favor of this analysis comes from Czech MECs. Czech MECs can be embedded under two predicates: *být* 'be' and *mít* 'have'. The former, like the Russian 'be', never agrees with the subject (i.e., it is impersonal) and the latter always agrees with the subject. In the example below, *nemám* 'I don't have' agrees with a first person *pro*. This is impossible with the verb 'be', as shown by the ungrammaticality of *nejsem* 'I am not'. 'Be' must appear in its

impersonal (formally 3rd person singular (neuter)) form *není* 'there is not'.[36]

(115) *Czech*

a. Už nemám kam jít.
already NEG:have:1SG where go:INF
'There is nowhere for me to go.'

b. Už { není /* nejsem} kam jít.
already NEG:be:3SG / NEG:be:1SG where go:INF
'There is nowhere (for me) to go.'

If, by hypothesis, Czech expletives must also be nominative, only 'have' is predicted to be capable of embedding impersonal predicates. As noted by Ceplová (2007:40), this prediction is borne out:[37]

(116) *Czech*

a. Jaktože je mokro? Tady přece {* nebylo / nemělo} kdy pršet.
how.come is wet here DISC.PART NEG:was:3SG / NEG:had:3SG when rain:INF
'How come it's wet? There's no time when it could have rained here.'

b. {* Nebylo / nemělo} se mu po kom stýskat.
NEG:was:3SG / NEG:had:3SG REFL him:DAT after who miss:INF
'There was nobody who he could be missing.'

Notice that resorting to an explanation based on control is highly dubious in this case, as the atomic predicate BE, corresponding to the impersonal verb *být* 'be', generally supports no argument which could potentially control the embedded PRO. The control relation can therefore never be verified (or falsified). Now, it is possible that Russian MECs headed by the impersonal 'be' are just like their Czech cousins. In both languages, such MECs can never host an expletive, which must be nominative. The only difference between the two languages is that Russian has a way to license non-empty referential subjects, namely by assigning dative. Czech must use the matrix verb 'have' to accommodate overt subjects.

In sum, we saw that there is an alternative explanation of the fact that Russian MECs do not support weather and impersonal predicates: the assumption

[36]Because in Czech there is no way to license subjects of infinitivals, MECs headed by 'be' always lack overt subjects. The subject is an arbitrarily interpreted PRO.

[37]Notice that both 'have' in (116) and 'be' in (115) (and in general) are marked for 3rd person singular neuter. Even though these features are morphologically identical, they must have a different underlying source: because 'have' *always* agrees, its features must come from the agreement with an empty expletive; on the other hand, 'be' *never* agrees, so its features must be default.

that Russian (as well as Czech) expletives must be nominative.

Argument 3: Active/passive voice switch As for the active/passive voice switch, Pancheva-Izvorski (2000) provides an example only from Bulgarian MECs, in which the switch does not yield truth-conditionally equivalent statements. This is in turn indicative of control rather than raising.[38]

(117) *Bulgarian* (Pancheva-Izvorski 2000:66)

a. Imam na kogo da predstavja Ivan.
have:1SG to whom SBJ introduce:1SG Ivan
'There is someone available to me to introduce Ivan to.'

⇏

b. Ivan ima na kogo da bâde predstaven ot men.
Ivan has:3SG to whom SBJ be introduced by me
'There is someone available to Ivan to be introduced by me.'

Unfortunately, it is impossible to test this effect in Russian. The reason is that Russian passive participles have to agree with subjects but at the same time they can only agree with nominatives (or: they only have nominative forms). Because the only potentially accessible subject is dative-marked, the participle has nothing to agree with and the resulting structure is ungrammatical. This is illustrated in (118a) for the passive *pokazan* 'shown'. The pragmatically odd (118b) is the closest grammatical counterpart of (118a) available. It makes use of a related adjective *pokazanym* 'shown', which, as opposed to passive participles, has a dative form. Unfortunately, it can only be construed as a property rather than as an event, which makes the comparison to the active voice impossible.[39]

(118) *Russian* (Aysa Arylova, p.c.)

a. *Ivanu est' komu byt' pokazan.
Ivan:DAT be:IMPRS who:DAT be shown:PASS.PART.NOM.MASC
'There is somebody that Ivan can be shown to.'

b. #Ivanu est' komu byt' pokazanym.
Ivan:DAT be:IMPRS who:DAT be shown:ADJ.DAT.MASC
'There is somebody such that Ivan can have the property of being/having been shown to that person.'

Thus, even though this argument argues against raising in Bulgarian, it is not applicable in Russian.

Argument 4: Simultaneous presence of matrix and embedded subjects It has been claimed that both matrix and embedded subject positions can be simultaneously filled with overt expressions in Russian. Pancheva-

[38] In §5.4.3, I argued that Bulgarian MECs contain a *pro* rather than a PRO. Even under this analysis, the active/passive voice switch is predicted not to yield truth conditionally equivalent statements.

[39] I am grateful to Aysa Arylova for making this issue clear to me.

Izvorski uses Rappaport's (1986) example to support the claim:

(119) *Russian* (Rappaport 1986:22; Pancheva-Izvorski 2000:66)
Nam est' komu robotat'.
we:DAT be:IMPRS who:DAT work:INF
'We have someone to work (for us).'

However, my informants (Aysa Arylova, Zhenya Markovskaya) claim that the above example is ungrammatical, certainly on the desired interpretation. It is very marginally acceptable if the sentence is interpreted as 'Somebody of us can work', in which case the putative matrix subject *nam* 'us' is construed as a domain restrictor of the wh-word *komu* 'who'. In that way, *komu* 'who' is the only real subject, *nam* 'us' simply being an agreeing modifier. The ungrammaticality of this type of examples is further confirmed by Rappaport himself, who gives the example in (120). Notice that there is no interfering interpretation for this example, as *mne* 'me' cannot be construed as a restrictor of *čto* 'what'.

(120) *Russian* (Rappaport 1986:11)
*Mne est' čto tebe sdelat'.
me:DAT be:IMPRS what you:DAT do:INF
'For me there is for you something to do.' *(intended reading)*

Interim conclusion We saw that all of Pancheva-Izvorski's arguments in favor of control and against raising in Russian MECs are inconclusive. Argument 1 turned out to be a non-argument. Argument 2 has a plausible alternative explanation. Argument 3 can be applied to Bulgarian, but not Russian. And finally, argument 4 is based on flawed data. In sum, the data are compatible with both the control and the raising analysis. It is obvious that more evidence is needed.

More evidence

In what follows, I give more arguments in the control vs. raising controversy. We will see that both sides get backed.

Argument 5: Thematic restrictions Control predicates differ from raising predicates in that they impose thematic restrictions on subjects. This is because subjects of control predicates sit in their theta-positions whereas subjects of raising predicates do not (raising predicates have no external theta-positions). Thus, (121b) is infelicitous with inanimate subjects.

(121) a. The {worker / saw} started/seemed to cut the tree.
b. The {worker /# saw} wanted/tried to cut the tree.

The following example shows that Russian MECs are constrained in exactly the same way:

(122) *Russian* (Aysa Arylova, p.c.)
{ Kole /# Vetru} zdes' nečego razrušat'.
Kolja:DAT / wind:DAT here NEG:what:GEN destroy:INF
'Kolja / The wind has nothing more to destroy here.'

Though somewhat fragile, this seems to be the first argument unambiguously pointing to control.

Argument 6: Case The subject in Russian MECs is dative-marked. As pointed out by Babby (1998, 2000), dative is generally assigned by infinitives to external arguments. Such infinitives typically have a modal construal, whether there is an overt modal element (123a) or not (123b). The matrix existential verb, on the other hand, is incapable of assigning the dative. In such cases (e.g. in possessives), the subject has to be realized in an oblique case, in particular it is embedded in a PP (124).[40]

(123) *Russian*
a. Aysa Arylova (p.c.)
Nam nado / možno rabotat'.
us:DAT obliged:PTCP / possible:PTCP work:INF
'We have to / can work.'
b. Babby (1998:23)
Začem bylo Ivanu pytat'sja otravit' Ninu?
why be:PAST Ivan:DAT try:INF poison:INF Nina:ACC
'Why should Ivan have tried to poison Nina?'

(124) *Russian* (Aysa Arylova, p.c.)
{ U nas /* Nam} est' problemy.
at us:GEN / us:DAT be:IMPRS problems
'We have problems.'

If this reasoning is correct, it shows that the dative of MEC subjects is assigned either by the infinitive or by some component of the infinitival clause. Under standard considerations of case-assignment, the subject must be either c-commanded by its case-assigner at some point in the derivation or at least be in a spec-head configuration with its case-assigner. Neither of these conditions are satisfied in the hypothesized control structure (125), while both are (or at least can be) in the underlying raising structure (126):

[40] As Aysa Arylova (p.c.) informs me, there is one case where the impersonal *est'* 'be' appears to assign the dative, namely in age-telling constructions:

(i) Mne est' 15 let.
me:DAT be:IMPRS 15 years
'I am 15 years old.'

However, there are two reasons to believe that *est'* 'be' in this construction is not comparable to the one in MECs. Firstly, it lacks an existential meaning, and secondly, it can only appear if it is emphatically/contrastively stressed (as in *I certainly AM fifteen years old*).

(125) **Control structure:** *c-command/*spec-head
[VP subject$_i$ be [MEC wh [InfP Inf [TP … PRO$_i$ …]]]]
[Dat] ◂····· [Dat]

(126) **Raising structure:** ✓c-command/spec-head possible
[VP be [MEC wh [InfP Inf [vP … subject …]]]
[Dat] ·····▸ [Dat]

With some stretching the control structure can go through, though, namely if one assumes that the case-assigning Inf head incorporates into the matrix predicate 'be' and thus reaches a position, in which it is in a relevant (spec-head) relation to the external argument.

(127) **Amended control structure:** ✓spec-head
[VP subject$_i$ Inf$_1$+be [MEC wh [InfP t$_1$ [TP … PRO$_i$ …]]]
[Dat] ◂··· [Dat]

Let us now move to the last argument, which puts (127) in doubt.

Argument 7: Wh-subjects What would be the ultimate evidence against a simple control account such as the one considered above? It would be a situation in which the subject must be present in the embedded clause at some point of the derivation. Precisely this situation is exemplified by the following example, where the subject is the wh-word of the MEC.

(128) *Russian* (Aysa Arylova, p.c.)
Nad etoj problemoj {* komu} bylo { komu} rabotat'.
on that problem who:DAT be:PAST who:DAT work:INF
'There is somebody to work on that problem.'

The wh-word in MECs can only be licensed in the scope (i.e. in the c-command domain) of the embedding predicate, which existentially binds the variable that the wh-word introduces. This condition certainly holds at LF, but as (128) clearly shows, it has to be satisfied even before the spell-out to LF: when the wh-word *komu* 'who' appears to the left of the verb *bylo* 'be', the sentence is ungrammatical.

The two examples below demonstrate that the wh-subject *komu* 'who' in (128) has the relevant properties of standard MEC subjects. (129) shows that the wh-subject cannot be accompanied by another subject (see the example (120) and the discussion of Argument 4) and (130) shows that the subject must be animate and is therefore presumably in a thematic relation to a control predicate (see (122) and the discussion of Argument 5).

(129) *Russian* (Aysa Arylova, p.c.)
*Nad etoj problemoj Maše nekomu rabotat'.
on that problem Maša:DAT NEG:who:DAT work:INF
'Maša has nobody to work on that problem.'

(130) *Russian* (Aysa Arylova, p.c.)
#Bylo čemu osveščat' proliv.
be:PAST what:DAT light:INF strait
'There was something that could light the strait'

In sum, the wh-subject has the same properties as any other overt subject of MECs. Therefore, it is desirable that MEC subjects in general appear in the embedded clause at some point of the derivation. At which point? Given that a (wh-)lowering analysis is a last resort one, MEC subjects should be *base-generated* in the embedded clause.

Interim conclusion I added three more arguments to those of Pancheva-Izvorski's. The results are ambivalent. Argument 5 supports the matrix-subject (control) account. Argument 6 is inconclusive. Finally, Argument 7 provides a mixed picture, suggesting that the subject originates in the MEC but at the same time has properties of control predicate arguments.

Conclusion

I conclude that neither the standard control, nor the standard raising account can explain the Russian facts. Instead, the evidence points towards the hypothesis that Russian MECs represent a special kind of control structures in which the controller is MEC-internal. The analysis, introduced in (107), is repeated below in the bracketed form.

(131) $[_{\text{BeP}}$ BE $[_{\text{MEC/ApplP}}$ WH $[_{\text{ApplP}}$ subject$_i$ Appl $[_{\text{FinP}} \ldots$ PRO$_i \ldots]]]]$

This analysis makes correct predictions concerning the relevant observations made above. The MEC is predicted not to be able to contain impersonal and weather predicates (Argument 2). This is either ruled out by the restriction on the case of expletives, presented above, or by the fact that these predicates do not tolerate referential PRO subjects and hence cannot be controlled into. The thematic restrictions (Argument 5) are imposed on the DP subject by the Appl head and the case (Argument 6) can be assigned within the MEC, as desired, possibly by the Appl head itself. The fact that wh-subjects exhibit the thematic restrictions and surface with dative case (Argument 7) also seems to be accounted for. They can simply be generated in SpecApplP, like any other subject, and still be in the scope of the MEC-embedding predicate.[41] Finally, the structure correctly predicts that the embedded clause and the matrix clause cannot both have their independent dative subjects (Argument 4).

Before I conclude, I would like to point out an interesting prediction of the present analysis. Since the dative subject in Russian MECs originates within the MEC, the matrix predicate is simply BE (or, more precisely BE_E^{MEC}). This means that it should in principle be possible for the BeP to be selected by the predicate AT and thus create the complex stative predicate AT+BE

[41] I will come back to the issue of wh-subjects in Russian MECs in §6.4 and will show that not all problems are solved by this assumption.

(see §4.2.2), corresponding to the possessive predicate. Though it is impossible to distinguish the atomic BE from from the complex AT+BE morphologically (both are spelled out as *est'* 'be:IMPRS' in Russian), the presence of AT should be detectable by the use of a possessive subject, which takes the prepositional form 'at DP:GEN' in Russian. This subject, in turn, should be able to cooccur with the embedded dative subject. The example in (132) shows that this prediction is borne out. The possessive subject *u menja* 'at me' cooccurs with the embedded dative subject *tebe* 'you'.

(132) *Russian* (Aysa Arylova, p.c.)
U menja est' čem tebe počinit' velociped.
at me:GEN be:IMPRS what:INST you:DAT repair:INF bike
'I have something with which you can repair the bike.'

This in turn seems to suggest that MECs are a proper subpart of what Livitz (2010) calls modal possessive constructions: "pure" MECs are MECs headed by the atomic BE and Livitz's modal possessive constructions are MECs headed by AT+BE.[42]

5.4.5 Summary

This section put forth yet another argument in favor of treating MECs as syntactically non-deterministic. In §5.4.1, restructuring MECs (a notion established in §5.2 and §5.3) were shown to correspond to raising MECs. This is because they are vPs and do not contain any functional structure that could license PRO. Nonrestructuring CPs, on the other hand, correspond either to control structures (§5.4.2), as found in Czech, Spanish, and many other languages, or to finite structures that are neither raising nor control (§5.4.3) and that contain an ordinary nominative-marked lexical subject. These appear in Bulgarian, Greek, and Serbian. The emerging and somewhat paradoxical generalization is that obligatory control subjunctive (i.e. finite) MECs exist only in languages that also have infinitival MECs (Czech and Hungarian). All other languages have ordinary finite MECs with lexical subjects. This generalization remains mysterious. The final subsection (§5.4.4) concentrated on the specific situation in Russian, where the control predicate—presumably a super-high applicative head—is generated within the MEC. I will come back to this idea in §6.4 and will hypothesize that the Russian pattern might in fact be more general. The reason why the pattern appears to be rare is that no other language with infinitival nonrestructuring MECs besides Russian licenses overt MEC-internal subjects.

[42] But see Livitz (2010) for some potential counterarguments.

5.5 Sluicing

In this subsection, I will concentrate on sluicing and the way the empirical material discussed so far contributes to our knowledge of the conditions under which sluicing may or may not apply. Thanks to their multiply ambivalent nature (questions vs. relatives, CPs vs. vPs), MECs provide valuable testing grounds for theories of sluicing. Before I turn to the discussion of sluicing in MECs and its implications for the theory, I provide some general background on sluicing.

5.5.1 Background on sluicing

The phenomenon of sluicing was probably first described by Ross (1969). It is traditionally characterized as IP-ellipsis in constituent (matrix or embedded) wh-questions.

(133) Lobeck (1995:54)
- a. – I'd like to leave now. – Why [$_{IP}$ ...]?
- b. Even though Mary's not sure who [$_{IP}$ ...], she thinks someone interesting is speaking tonight.

Until recently, sluicing was believed to appear exclusively in wh-questions. The reason is that other types of IP-ellipses are clearly ruled out. To give a few examples, consider the ungrammaticality of IP-ellipsis in complement clauses (134a), relative clauses (134b), adjuncts (134c), or the ellipsis of IP-complements to some verbs (134d).

(134) Lobeck (1995:§2.3.3)
- a. *Even though Mary hopes that [IP ...], she doubts that anyone interesting is speaking tonight.
- b. *Someone wants to talk to Mary but the person who [IP ...] is too shy to approach her.
- c. *John talked to Bill, but before [IP ...], Mary called.
- d. *John appears to be smart and Mary also seems [IP ...].

The accounts were set up accordingly, in order to capture the question-only generalization. Lobeck (1995) constrained sluicing to IPs that are "licensed" and "identified". These conditions were formulated in terms of proper government and in such a way that they picked out only IP complements to interrogative C-heads, whose SpecCP contained a wh-phrase. Merchant (2001) reformulated this story in minimalist terms. He proposes that sluicing (and ellipsis in general) has a syntactic source which he calls E-feature ("ellipsis feature"). In English, the presence of this feature on a C-head is licensed if the C head has the feature specification [+wh, +Q]. The E-feature is further interpretable at the interfaces, triggering the non-pronunciation of the complement at PF and its givenness (anaphoricity) at LF.

Van Craenenbroeck and Lipták (2006) were the first to claim that sluicing is not limited to wh-questions. In many languages, IPs asymmetrically c-commanded by focus-fronted constituents (*Katit* below) can also be elided.

(135) *Hungarian* (Van Craenenbroeck and Lipták 2006:249)
AZ A FIÚ hívta meg Esztert, aki KATIT [IP . . .].
that the boy invited PV Eszter:ACC REL:who Kati:ACC
'The boy who invited Eszter was the one who invited Kati.'

Van Craenenbroeck and Lipták provide convincing evidence that the elided constituent in (135) and comparable examples is really an IP and not simply a VP, as assumed for comparable data in Polish by Szczegielniak (2004). Provided that their arguments are sound, Lobeck's and Merchant's generalization must be abandoned: sluicing targets not only complements of interrogative complementizers but also complements of heads whose specifiers host focused expressions. In order to capture this extended observation, Van Craenenbroeck and Lipták (2006:257) propose the following correlation:

(136) **The wh/sluicing correlation**
The syntactic features that the E-feature has to check in a certain language are identical to the strong features a wh-phrase has to check in a regular constituent question in that language.

While English wh-phrases need to check the feature set [+wh, +Q], Hungarian wh-phrases are less constrained and in that they only require to check a [+Op] feature. Van Craenenbroeck and Lipták argue that these features can be checked either in SpecFocP or in SpecDistP in Hungarian, yielding the result that not only wh-phrases but any phrases that can move to these positions can feed sluicing.

5.5.2 Sluicing in MECs

MECs are interesting for the study of sluicing for at least two reasons. On the one hand, they provide novel support for the wh/sluicing correlation of Van Craenenbroeck and Lipták (2006). On the other hand, they also question this correlation and, more seriously, they question the classical definition of sluicing as IP-ellipsis.

Van Craenenbroeck and Lipták (2006) predict that MECs will allow for sluicing just in case the wh-movement they perform mimics the one in interrogatives. The previous two subsections strongly suggest that this is indeed the case: the contrast between Hungarian wh-MECs and a-wh-MECs is particularly telling (see §5.3.2), but also MECs embedded under dynamic predicates and Italian MECs seem to point in the same direction (see §5.3.3). The facts are clear enough, so I am not going to repeat them here. What is particularly interesting about the Hungarian facts is that we are dealing with purely formal minimal pairs, since both types of MECs are truth-conditionally and "func-

tionally" indistinguishable. Yet, the availability of sluicing strictly follows the wh/sluicing correlation in (136).

The conclusion that I will draw from sluicing in restructuring MECs (see §5.2 and §5.4) are less satisfying for the current theoretical *status quo*. In fact, both basic tenets of theories of sluicing are put in danger. Firstly, the relevant type of sluicing is almost certainly not an IP-ellipsis. Secondly, sluicing fed by short wh-movement does not seem to track interrogative sluicing. I will use Czech for purposes of illustration but I believe that any other language that displays short wh-movement, as characterized in §5.3.1, could serve to support the same point.

Consider the example in (137). What is the identity of the elided constituent? In §5.4.1 and §5.4.2 we saw that Czech MECs are ambiguous between vPs and CPs. If the reduced MEC in (137) corresponds to a CP, there is no issue. If, on the other, it is a vP, problems for the theory of sluicing arise.

(137) *Czech*
Karel chtěl jít ven, ale neměl s kým.
Karel wanted go:INF out but NEG:had with who
'Karel wanted to go out but there was nobody to go out with.'

I argued that the hallmark of CP-hood is the absence of clitic climbing. If sluiced MECs like (137) are CPs, then clitics are expected not to be able to climb out of them, in which case they would be caught in the ellipsis site and could never surface. If, on the other hand, the wh-phrase can be preceded by clitics that unambiguously originate within the MEC, the sluiced MEC is clearly a vP. The facts appear to favor the former position. As witnessed by (138a), the clitic *ji* 'her' can either climb or stay in the MEC. However, if sluicing is applied, as in (138b), clitic climbing is ruled out.

(138) *Czech*
a. Karel ji chtěl pozvat, ale bohužel { ji}
Karel her:CL wanted invite:INF but unfortunately her:CL
neměl kam { ji} pozvat.
NEG:had where her:CL invite:INF
b. Karel ji chtěl pozvat, ale bohužel (* ji)
Karel her:CL wanted invite:INF but unfortunately her:CL
neměl kam.
NEG:had where
'Karel wanted to invite her but there was no place he could invite her to.'

From (138) it might seem that the battle is won by standard sluicing theories: because sluicing is impossible at the vP level in the first place, the only possible structural analysis of (138b) is a CP. The presence of a CP accounts for the impossibility of clitics to climb, which results in their necessary presence in the

ellipsis site. Unfortunately, drawing this conclusion is premature. There is an alternative explanation of the ungrammaticality of the clitic-climbing variant of (138b). It is well-known that ellipsis systematically leads to so called movement "bleeding". As first observed by Lasnik (1999) for T-to-C movement in English, movement is prohibited if it targets an expression that would be elided if it didn't move. If sluicing in English is IP ellipsis and if verbs undergo movement to C in questions, one would expect the remnant to be like the ungrammatical (139B).

(139) A Dave invited somebody.
B *[$_{CP}$ Who [$_{C'}$ did [$_{IP}$ . . .]]]?

Whatever the ultimate explanation of the above effect is (see e.g. Boeckx and Stjepanović 2001; Van Craenenbroeck and Lipták 2008), it is clear that the movement of the verb needs to be "bled", i.e. must not take place in order to arrive at a grammatical result. The assumption that clitic movement is targeted by bleeding is strongly supported by the following observation. The second clause of (140a) displays classical VP-ellipsis. The clitic *ji* 'her' must also be targeted by the ellipsis, even though its climbing is obligatory in non-elliptical contexts, as shown by (140b).

(140) *Czech*

a. Měli ji ukazovat, ale bohužel (* ji) nebudou [$_{VP}$ . . .].
should her show:INF but unfortunately (her:CL) NEG:will

'They were going to show her but unfortunately they won't [show her].'

b. Bohužel { ji} nebudou {* ji} ukazovat.
unfortunately her:CL NEG:will her:CL show
'Unfortunately, they won't show her.'

This example clearly shows that the impossibility for clitics to move out of sluiced MECs need not be due to their categorial status. The MECs could as well be vPs with clitic movement prohibited by bleeding.

There are two pieces of evidence that support the availability of sluicing at the vP level. In §5.4.2 I showed that whenever Czech MECs are CPs, the verb that selects them behaves as a control verb, consequently prohibiting the use of impersonal and weather predicates as the main MEC-predicate. The example (141) shows that MEC-sluicing is perfectly possible even with weather-predicates, strongly suggesting that the MEC is not a CP:

(141) *Czech*
Myslel jsem, že je tu mokro, protože pršelo, ale pak jsem
thought be:1SG that is here wet because rained but then be:1SG
si uvědomil, že nemělo kdy [$_{vP}$ . . .].
REFL realized that NEG:had when
'I thought it was wet here because it rained but then I realized that there was no time to rain.'

Another piece of evidence comes from instances of sluicing where the remnant contains more than just the wh-word. For instance in Hungarian the landing site of wh-movement is located below the complementizer *hogy*, making it possible for the complementizer to survive sluicing.

(142) *Hungarian* (Van Craenenbroeck and Lipták 2008:141)
János meghívott egy lányt, de nem tudom hogy kit [$_{IP}$ . . .]
János invited a girl but NEG know:1SG that who
'János invited a girl, but I don't know who.'

This effect can be replicated for Czech MECs in which the wh-word moves in front of a non-verbal predicate such as *pyšný* 'proud' in (143) but not as high as the infinitival copula *být* 'be' associated with the predicate.

(143) *Czech*
Karel nemá být na co pyšný.
Karel NEG:has be:INF on what proud
'Karel has nothing to be proud of.'

Since the copula is base-generated in the position where it is pronounced, it is not targeted by bleeding and is therefore predicted to be contained in a sluicing remnant. As illustrated in (144), this is prediction is borne out.

(144) *Czech*
Karel je hrozně pyšný, i když nemá být na co [$_{AP}$ . . .].
Karel is very proud even when NEG:has be:INF on what
'Karel is very proud, even though he has nothing to be proud of.'

So far, I have shown that sluicing in restructuring MECs is an instance of vP-ellipsis, in some cases even AP-ellipsis. This conclusion clearly goes against the classical view of sluicing as IP-ellipsis. Yet, it might favor the more flexible approach of Van Craenenbroeck and Lipták (2006), under which sluicing in a language tracks the syntax of interrogative wh-movement in that language. Indeed, in §5.3.1 I argued that wh-movement in MECs should be identified with what I called short wh-movement (or indef-movement), which subsumes the movement of indefinite pronouns but also the low movement of wh-words in multiple interrogatives. If van Craenenbroeck and Lipták's wh/sluicing correlation holds, it should be possible to show that sluicing in restructuring MECs is simply parasitic on sluicing in multiple interrogatives. However, proving this

turns out to be anything but straightforward. Let us take a run-of-the-mill example of a multiple interrogative in Czech, (145). According to the present assumptions (supported e.g. by Sturgeon 2007), the higher wh-word *komu* 'who' is hosted by one of the left peripheral CP-projections, while the lower wh-word *co* 'what' occupies the edge of a vP—by hypothesis a structural position which is identical to the one of wh-words in restructuring MECs.

(145) *Czech*
Nevím, [$_{CP}$ komu [$_{TP}$ jsi [$_{vP}$ co dal]]].
NEG:know:1SG who:DAT be:2SG what:ACC gave
'I don't know what you gave to whom.'

If the low wh-movement in multiple interrogatives can feed sluicing, then one would expect (146a) to be grammatical. However, the only grammatical way to proceed with multiple-wh sluicing is for the wh-words to be the only expressions in the remnant, as in (146b).

(146) *Czech*
Vím, že jsi každému něco dal, ale
know:1SG that be:2SG everybody:DAT something:ACC gave but
nevím...
NEG:know:1SG
'I know that you gave something to everybody, but I don't know...'
a. *... komu jsi co [$_{vP}$ ...]
who:DAT be:2SG what:ACC
b. ... komu co [$_{vP}$ ...]
who:DAT what:ACC
'... who you gave what.'

Notice that the ungrammaticality of (146a) cannot be due to bleeding: the auxiliary *jsem* 'be:1SG' is base-generated where it is spelled out. What structure underlies the sluicing in (146b)? Arguably, it is the marginal (to my ears) structure (147), where both wh-words move to the CP-domain (see Meyer 2003 for discussion of this type of wh-questions in Czech).[43]

(147) *Czech*
??Nevím, [$_{CP}$ komu co [$_{TP}$ jsi dal]].
NEG:know:1SG who:DAT what:ACC be:2SG gave
'I don't know what you gave to whom.'

Whatever the proper analysis of (146b),(146a) seems to show clearly that the low wh-movement in multiple interrogatives cannot feed sluicing. Together with the observation that wh-movement in restructuring MECs *can* feed sluicing, this poses a serious problem for the wh/sluicing correlation (136) of Van Crae-

[43] An analogous observation is made by Van Craenenbroeck and Lipták (2009) for Hungarian and Romanian for multiple focus sluicing.

nenbroeck and Lipták (2006), which establishes that sluicing of non-interrogative phrases, among which the wh-words in MECs undoubtably belong, always mimics the sluicing of corresponding interrogative phrases.

5.5.3 Discussion

In the present section I exploited the knowledge gained so far for an evaluation of a theory of sluicing. Two major tenets of the theory have been questioned. Firstly, I have shown that the structure elided under sluicing in restructuring MECs is a vP (or an AP) rather than an IP, as usually assumed. Secondly, sluicing in restructuring MECs is apparently not directly related to interrogative sluicing. Though the structural position of the wh-word is available in multiple interrogatives, it cannot feed sluicing.

On the face of it, there are two possible ways to deal with these facts. The first option is to deny that the kind of ellipsis in restructuring MECs is sluicing. After all, it clearly involves vP-ellipsis and moreover, it is unrelated to sluicing in interrogatives. On the other hand, it is obviously functionally related to standard interrogative sluicing and to CP-level sluicing in MECs, which *is* parasitic on interrogative sluicing and which is very common cross-linguistically. The second option is to endorse the present reasoning and consequently rebuild the theory of sluicing.[44]

But what remains of a theory when both of its two basic tenets must be abandoned? This question brings us to the very issue which was recently raised by Van Craenenbroeck and Lipták (2009:§1), who start out their paper from the observation that "[t]he study of ellipsis in current generative grammar is still strongly—perhaps too—construction oriented." Van Craenenbroeck and Lipták (2009) attempt to make a step away from this taxonomical approach to ellipsis by lifting the stipulation that sluicing is limited to wh-questions, by showing that also focus fronting can feed sluicing. However, even though their approach is arguably more general than the one promoted by their predecessors, Lobeck (1995) and Merchant (2001), construction-specificity still creeps into their account. Sluicing is not a type of ellipsis that is limited to interrogative syntax, yet, it is one that it is *constrained* by interrogative syntax. One has to wonder whether this is a step forward. The main question still remains: Why does interrogative syntax play a role in sluicing at all? Why is there an elliptical process that targets specifically interrogatives, be it directly (Lobeck, Merchant) or indirectly (van Craenenbroeck and Lipták)? It seems to me that an answer to this question will always be stipulative, esp. in a system like van Craenenbroeck and Lipták's, where interrogative syntax does not form a natural class across languages (English uses SpecCP, Hungarian SpecFocP).

[44] A third option, which is based on a weaker interpretation of the wh/sluicing correlation (136) than I have (possibly mistakenly) assumed, was suggested to me by Anikó Lipták (p.c.): Sluicing in restructuring MECs is licensed by interrogative-related features. The analogous sluicing in actual interrogatives, which is ungrammatical, as witnessed by the example (146a), is ruled out for independent reasons.

The conclusion arrived at in this section may well be taken as a stimulus to take a further, more decisive step away from construction-specificity: restructuring MECs display an elliptical process that suspiciously resembles sluicing and yet, lacks what have always been considered the distinctive features of sluicing. Ideally, what we call ellipsis should receive a more or less unified account, irrespective of the syntactic category targeted by it and the syntactic category of the remnant: the explanation should shift from syntax to the interfaces and plausibly be couched within Merchant's (2001) semantic conditions on the remnant (in terms of contrast) and the elided material (in terms of givenness). I leave further investigations into the properties of sluicing in MECs for future research.

5.6 Conclusion

I started this chapter by discussing two related hypotheses. According to the first hypothesis, lexical predicates, such as the MEC-embedding predicate BE, are less constrained in syntactic selection than functional heads, such as the Qu operator selecting questions or the D operator selecting free relatives. According to the second hypothesis, there are no specific syntactic constraints on wh-movement, such as wh-feature checking, and wh-movement therefore reduces to adjunction. The conjunction of these hypotheses raises the expectation that the syntax of MECs is much more flexible than related A-bar constructions.

In §5.3, I showed that the main determinant of possible syntactic sizes of MECs is the style of wh-movement which a particular language allows for. The basic distinction is drawn between languages that allow for short wh-movement, i.e. wh-movement to the edge of vP, and languages that do not. Only the former class of languages can form what I called restructuring MECs, i.e. MECs that exhibit restructuring phenomena such as clitic climbing. Languages of the latter class construct their MECs according to the interrogative pattern and less commonly according to the relative clause pattern, i.e. essentially as CPs. If any differences in syntactic behavior are observed between MECs and their corresponding interrogatives/relatives, they are predicted to boil down to the absence of the functional operator (Qu/D) in MECs. I presented evidence from Hungarian showing that this prediction is in fact be borne out.

In §5.4, I developed the argument further, concentrating on the raising and control properties of MECs and MEC-embedding predicates. I showed that restructuring MECs naturally map to raising structures. This is because they do not contain the necessary functional structure to license PROs. Non-restructuring MECs, on the other hand, map to control structures. While obligatory control seems to be the default option, languages exhibiting non-obligatory control are also attested. Finally, I showed that Russian MECs represent a third type of control structure, one where the control predicate appears within the MEC.

The last section of the chapter, §5.5, is a brief discussion of the consequences

of the present findings for the theory of sluicing. While some well-established generalizations about sluicing were corroborated, others might need reconsideration.